



DMINISTRATION REPORT

OF THE

OF PORT-OF-SPAIN

FOR THE YEAR

1952

BY

MEDICAL OFFICER OF HEALTH

RCB 27(V)

GOVERNMENT PRINTING OFFICE, TRINIDAD, B.W.I.—1953





ADMINISTRATION REPORT

OF THE

PUBLIC HEALTH DEPARTMENT OF THE CITY OF PORT-OF-SPAIN

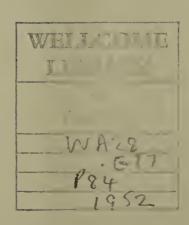
FOR THE YEAR

1952

BY

DR. RODERICK MARCANO, O.B.E., M.D. (Lond.), M.R.C.P. (Lond.), D.P.H. (Lond.)

MEDICAL OFFICER OF HEALTH



Local Authority in the Urban Sanitary District of the City of Port-of-Spain

1951-52

THE CITY COUNCIL

HIS WORSHIP THE MAYOR, COUNCILLOR GEORGE CABRAL, J.P.

Deputy Mayor:

COUNCILLOR B. I. LALSINGH

Aldermen:

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R. MITCHELL

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C. B. TYWANG

Administration Report of the Public Health Department of the City of Port-of-Spain. Year 1952

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Public Health Department
35, Frederick Street
Port-of-Spain
Trinidad, B.W.I.
21st October, 1953

URBAN SANITARY DISTRICT OF THE CITY OF PORT-OF-SPAIN

SECRETARY, LOCAL AUTHORITY,

SIR.

I have the honour to submit, for the information of the Local Authority, the Annual Report on the Health and Sanitary condition of the Urban Sanitary District of the City of Port-of-Spain for the year ended 31st December, 1952.

Speaking generally, it seems clear that the Health and Sanitary condition of the Urban Sanitary District are now slowly but surely taking a turn for the better, and year after year it is possible to note a steady and continuous improvement in nearly every aspect of the public health, though no spectacular results were achieved and no rapid reduction in the morbidity of, or the mortality from, any disease, or no great amelioration of the sanitary state of any sub-district, can be recorded in the year under report.

In fact 1952 can be stated to be on the whole quite a satisfactory year.

No outbreak of any epidemic disease occurred to disturb the even tenor of the Public Health Department; the Estimates were approved in good time; the routine work of the Department proceeded without any interruption of any kind; and the various campaigns were executed with a degree of success that cannot be considered as anything but satisfactory.

The Urban Sanitary District was subjected to the usual house to house inspection by the District Sanitary Inspectors and nuisances got rid of, and the sanitary condition improved, to the extent that improvement can be effected without the execution of major sanitary works.

The campaign designed to secure good, clean, and wholesome food was actively prosecuted in the year 1952 and the much needed improvement in this aspect of the health of the City, which is long overdue, is at last beginning to make its appearance, though there is yet a long way to travel.

The anti-aedes campaign to eliminate aedes aegypti from the Urban Sanitary District and so prevent yellow fever from gaining a foothold, if ever it was introduced here, continued unabated, and the anti-aedes inspectors were engaged during the whole of the year under review in visiting the 12,000 odd individual premises which comprise the City, and in getting rid of the larvae of aedes aegypti and the various breeding grounds of the adult mosquito by the use of a solution of DDT wettable powder as a larvicide; and the results achieved, though not by any means spectacular, can be considered satisfactory.

Coming to the vital statistics themselves, the various rates worked out represent in nearly every case an improvement on the corresponding rates for the previous year, and these figures do not compare unfavourably with similar rates in the cities of comparable size in temperate climes. That does not, of course, mean to say that we should rest on our oars, if ever it is possible for a Public Health Department to rest on its oars, for there is much leeway yet to be made up and much lower figures are capable of attainment, and actually much lower rates are being recorded in various centres throughout the civilised world.

A perusal of the yearly sections of the body of the report will at once make it apparent that a slight change in the method of presenting the vital statistics, and a greater change in the listing of the various causes of death has been adopted. This is in keeping with international standards and so permits of easier and more effective comparison with figures and causes of deaths in the other parts of the world.

Rates are now calculated on the basis of 100,000 population, and the intermediate list of 150 causes for the tabulation of morbidity and mortality has been adopted in keeping with what now obtains in the rest of the Colony.

The mean population has been estimated at 109,384, an increase of 2,375 souls on the corresponding figure of 107,009 for the previous year 1951; the natural increase of population was 3,021 souls, 282 more than in 1951.

The birth rate worked out at 3,761 as compared with 3,723 per 100,000 in 1951, and the death rate 1,000 as compared with 1,162 per 100,000 in 1951. The infant mortality rate was 33.29 per 1,000 live births as compared with 41.94 in 1951.

In so far as specific diseases were concerned the death rate for notifiable infectious diseases as a whole worked out to be 111 per 100,000 as against 113 per 100,000 in the year before.

There was a slight, but hardly significant, increase in the death rate from pulmonary tuberculosis and enteric fever, 26 and 11 per 100,000 respectively as compared with 25 and 7 respectively per 100,000 in 1951, but the death rates from pneumonia (all forms), 66; bronchitis, 16; influenza, 0; diarrhoea and enteritis, 36; malaria, 0; syphilis, 5; Bright's disease and nephritis, 25; diseases of the heart and blood vessels, 226; and diseases of the nervous system including cerebral haemorrhage, 129; cancer and other malignant diseases, 82, per 100,000 population, all showed a welcome and in some cases a substantial decline.

It is true that no major capital works were started during the year under review and this is the only big disappointment that falls to be recorded.

Year after year I have been making constant reference to the fact that the very necessary major works of sewerage, of road widening and road paving in the East Dry River and Belmont Sub-Districts; of the relaying out of lots and of a main drainage system in the East Dry River Sub-District and in the Cocorite and the Western Main Road Areas; of the revamping of the Water Distribution System and of the provision of a potable water supply from sources not liable to constant pollution, are overdue, but so far very little in the way of actual work, except minor improvements here and there, has been accomplished.

Hopes, however, were running high during the year, as surveys in both the East Dry River Sub-District and in the Cocorite and Western Main Road Areas were proceeding actively and by the end of the year had been almost entirely completed. In fact, during the early part of the current year these surveys were actually completed and they are now receiving the active consideration of the Committees appointed for the purpose, and it is sincerely hoped that before long we shall be witnessing the beginning of these long overdue projects. When this is done a milestone in the history of the Urban Sanitary District will have been reached and the outlook for a first class healthy, clean, and prosperous City will be bright indeed.

My heartfelt thanks are again due to His Worship the Mayor, Aldermen, and Councillors of the Local Sanitary Authority whose sustained interest in all matters concerning the public health is a cause for gratification, and whose advice, help, and co-operation in all problems affecting the Department have always been readily forthcoming and freely and generously given. In fact it is a truism to state that there is never, in the ranks of the Local Sanitary Authority, any difference of opinion as to the need for continuously improving the public health, and for providing and maintaining public health amenities of the highest order.

As in the past, so in the year under report, the Public Health Department continued to receive the ready help and loyal co-operation of the City Engineer's and Town Clerk's Departments and much of what has been achieved would have been impossible without their assistance. For this we express our heartfelt gratitude to the City Engineer and the Town Clerk.

I have the honour to be,

Sir,

Your obedient servant,

RODERICK MARCANO Medical Officer of Health

NATURAL AND SOCIAL CONDITIONS OF THE DISTRICT

The same problems that I made reference to in my last report presented themselves during the year under review and the solution seemed as far off as it appeared a year ago.

Shanty Town still remains a blot on the south-eastern landscape; no major works of any kind have been executed in the East Dry River and Belmont Sub-Districts, and the narrow lanes, the small and often irregular lots, the primitive natural watercourses and the privy cesspit system still remain to exert the cumulative effect of making these areas the most unhealthy in the Urban Sanitary District with the highest morbidity and mortality rate from all diseases, infectious as well as non-infectious.

No new addition was made to the City and the area of 2,550 acres still remains the same, though the population, as is to be expected, has shown the natural increase that I referred to in my introductory remarks.

The reclaimed lands to the south of Wrightson and Mucurapo Roads formerly occupied in part by units of the American Army, continue to remain waste lands often overgrown with bush and a fertile source of nuisances, especially mosquito nuisance, to abate which a good deal of time and labour have to be expended.

It is true that new buildings like the Licensing Office and the Home for Crippled Children were making their appearance here by the end of the year under review but, for the rest, the area still remained a pasturage for cattle, goats, and even occasional donkeys, as well as a dump for refuse and exercta of all kinds.

The works which were being earried on to the Maraval River where it crosses Tragarete Road and which were being actively executed towards the end of the year 1951, as stated in my last annual report, were completed early in the year under report and the new Tragarete Road Bridge is a wider, safer, stronger and more imposing edifice than its predecessor.

I am aware that plans for all these necessary major capital works were taking shape towards the end of the year 1952, but the need is so urgent, especially in the East Dry River Sub-District, that one must, inevitably, be impatient at the relative slowness with which plans on paper are being translated into actual work in the field.

SANITARY CIRCUMSTANCES

Water

Here again no new development of any great importance has taken place during the year under report. It is true that towards the end of the year an exchange of wells took place between Government and the Corporation, the Diego Martin shallow wells having been handed over to Government for the two deep wells in the Docksite Area, but this exchange which made it possible for Government to supply the Diego Martin Area with potable water and the Corporation to augment its supply to the hilly areas of the East Dry River and Belmont Sub-Districts hardly touched the problem of an adequate potable supply to the Urban Sanitary District.

As I have over and over again stated in previous reports, the existing sources of water supply are showing increasing evidence of a raw product that is not entirely above suspicion, as it should at all times be, and as a result filtration and sterilisation have become a matter of prime importance in the production of a potable supply, and slower and more effective sand filtration, as well as an increasing amount of sterilising chemical have to be resorted to.

As is to be expected the river sources are the ones that are specially affected, their catchment areas becoming more and more urbanised and "built or grown upon". In fact the bye-laws for the protection of the Maraval and Cocorite water supplies which were passed towards the end of the year 1951 have had to be very strictly enforced if further deterioration is to be avoided and a possible calamity in the way of an epidemic of bowel-filth disease averted.

Bye-laws for the protection of the St. Ann's and Cascade water supplies have also been drafted and are on the point of becoming law.

It has long become clear that this state of affairs, so far as the river sources are concerned, cannot be permitted to continue for very much longer and alternative sources will have to be found to replace these supplies, possibly by augmenting the amount of water now being extracted from underground sources. Fortunately the water from our well sources continue to preserve their standard of good initial purity and though a small amount of chlorine is added to guard against the possibility of pollution in the Distribution System, this is comparatively small and no great cost is thereby incurred. Deepening of existing shallow wells which are now in supply and the drilling of an additional number of deep wells seem now to be imminent and should not now be too long delayed.

In addition to the municipal sources of supply to the Urban Sanitary District there are a number of wells which have been sunk on private property and which are used mainly for commerical purposes but also to a certain extent for ordinary drinking and domestic purposes. The majority of these are deep wells but a few are shallow wells and are used either for cooling engines or for washing cars, &c.

Regular sampling of all sources of water supply, public as well as private, takes place every day of the week except on Sundays, with results for the year 1952 that are listed in the table given hereunder.

The water-sampling Sanitary Inspector also patrols regularly the various catchment areas with a view to preventing further pollution and to stopping the creation of additional sources of pollution, such as those associated with building, gardening, the pasturing of animals, &c. &c.

Bacteriological Examination of Water Supply 1952

			No. of	RESULTS OF EXAMINATION			
WHERE	DERIVED		samples taken	Safe	Unsatis- factory, presumptive B. Coli present	Unsafe (faecal B. Coli present)	
*Diego Martin (Wells) Docksite Wells (untreated) †St. Clair Pumping Station †St. Clair Wells (untreated) †St. Clair Wells (treated) †Maraval (River) §Cascade (River) §St. Ann's (River) Queen's Park Savannah V Picton Reservoir Colonial Hospital (Tap) 143, Charlotte Street (Tap) Microbiological Institute Masson Hospital (Tap) St. James (Taps) Woodbrook (Taps) City Proper (Taps) East Dry River (Taps) Belmont (Taps)	\(\text{v} \\ \text{v} \\ \text{v} \\ \text{v} \\ \text{vell (untreated)} \\ \text{vell} \\ \text{v}		104 35 31 53 45 55 61 50 49 111 48 37 48 52 51 55 28 46 56 57 45	100 32 31 52 45 52 45 48 49 80 47 36 47 51 51 53 27 46 36 54 43	4 3 1 3 8 2 31 1 1 1 1 2 1 20 3 2		
Trinidad and Tobago Elec Wrightson Road **Furness Withy & Co., 84, Sanitary Laundry, 1, Aja *Electric Ice Co., 3, Ariapi Canning & Co., 60-68, Ric	ctricity Commiss Marine Square x Street ita Avenue	ion,	48 44 48 49 96	27 1 34 34 94	21 43 14 15 2		
			1,402	1,215	179	8	

Standard of Purity: B. Coli absent in 100 c.c.

Chemical Examination of Water Samples examined by Government Chemist—1952

- v	VHERE	DERIVED			No. of samples examined	No. of samples found safe
Picton Reservoir				 	 397	397
Maraval Reservoir		•••		 	 13	13
Cascade Reservoir			•••	 	 12	12
St. Ann's Reservoir	••			 	 12	12
Cocorite Pumping Station .				 	 11	11
Cocorite Pumping Station (for s	alinity)			 	 297	297
Diego Martin Pumping Station				 ··· .	 7	7
Docksite Wells				 	 11	11
Queen's Park Savannah Well .			•••	 	 11	11
St. Clair Wells	••			 	 6 .	6
					777	777

^{*}Chlorinated, not filtered.

[†]Filtered after chlorination.

[‡]Chlorinated before distribution.

[§]Filtered before chlorination.

^{||}Filtered before chloramination.

[¶]Chlorinated, after having been filtered and chloraminated.

^{**}Not used for drinking purposes.

^{***}Sometimes used for drinking purposes.

Drainage and Sewerage

But for the natural drainage of the City of Port-of-Spain which has been fully detailed in many of my previous reports and which can be described briefly as quite satisfactory, because of the general slope from North to South and from East to West, the City would not present that dry appearance after a heavy downpour which is so well known and which is such a contrast to the flooded streets and swollen drains especially in the down-town areas that are such a common occurrence after heavy rains.

There are a number of natural watercourses scattered throughout the Urban Sanitary District which hold stagnant water and which are a fruitful source for the breeding of mosquitocs. They need constant attention; clearing, cutlassing and oiling and the amount of money spent in oiling, &c. could easily have gone a long way towards the expenditure on capital works for their permanent paving.

I refer especially to the Maraval River, the Santa Barbara Ravine, and the Bournes Road Ravine which are so urgently in need of permanent works for the purpose of eliminating the potential danger to the health of the City which they present. The banks of the Maraval River particularly in its lower reaches are tending to crumble thereby rendering unsafe the various buildings adjoining its banks. Plans are under way for the paving of the Santa Barbara Ravine from its source, and for the Bournes Road Ravine right down to its southern outlet across Mucurapo Road, but capital works for the Maraval River are now long overdue.

In the meantime the routine clearing, levelling, canalising and oiling of these and other subsidiary watercourses continued unabated in the year under report, directed essentially to the elimination of potential breeding grounds and the abatement of actual mosquito nuisance.

No major works of sewerage were undertaken during the year 1952 and except for the continued connecting up of premises with the Council's Sewerage System in Woodbrook which has been going on now for the past ten years, and which is designed to eliminate completely the privy cesspit and septic tank system in that sewered District, no addition to the sewerage system in the City was made in the year under report.

It is true that the position at the Mucurapo Workshop was made more secure by the installation of much needed spare parts and by a general overhaul of all the engines at the Station, but the much hoped for sewering of Belmont and the East Dry River Sub-District still seem a long way off. The plans were being constantly examined during the year under report and the matter was even discussed with the Consulting Engineers, but the decision to go ahead with what is a major public health project and with what will make an enormous difference to the health of the Urban Sanitary District, as has been pointed out in every Annual report for the past fifteen years, still remains an unfulfilled dream. It is to be hoped that the year 1953 will not come to an end without a start of some kind being made with this major piece of public health work.

Scavenging and Refuse Disposal

The scavenging of the City of Port-of-Spain is not unsatisfactory and the City presents a clean and well kept appearance especially in the lower down-town areas after they have been swept, and the refuse collected and disposed of in the early hours of the morning.

This, the work of the Divisions under the control of the City Engineer, is comparatively well done and the scavengers who are in the main Indian labourers deserve to be commended on the success they achieve in this very important public health function.

The scavenging, however, is not equally well done in the East Dry River, Belmont and St. James Sub-Districts, in the former particularly, there being much leeway to be made up in these areas and several gaps to be filled.

Often public dustbins are left full and overflowing here and streets, private streets especially, are not scavenged at all, and in the East Dry River Sub-District some of the hilly areas and portions of the narrow irregular lanes, which admittedly are inaccessible, are completely neglected and this, coupled with the fact that it is no uncommon occurrence for the householder to empty his dustbin in the lane or in any unoccupied ground, combines to give the East Dry River Sub-District a dirty appearance and to make it the most unhealthy sub-district of the City.

Refuse collection and refuse disposal are undertaken by the Transport Train, under the control of the City Engineer, and this is effected mainly by mechanical refuse collectors and to a much lesser extent by mule-drawn carts. The collected refuse is disposed of at the Eastern Dump by a system of tipping which is far from being "controlled tipping".

The work of refuse collection is again well done, but there is need for improving the regularity of collection so as to avoid the unsightly scene of a full and overflowing dustbin being left unemptied on the pavement with half its contents deposited helter-skelter fashion by stray dogs in their incessant search for scraps and bits and pieces of food. Refuse collectors should be properly filled and covered before they set out for the Dump, and the synchronisation of the dumping of refuse by the women scavengers of the Eastern Division with the passage of the collecting vehicles would do a lot to eliminate the large collections of refuse that are dumped at various points in this Division, refuse which the female scavengers have had, perforce, to head down the hilly areas in large pans on their heads.

I must again repeat what I have been saying now for years, namely that scavenging and refuse collection must be done every day in the week including Sundays in every section of the Urban Sanitary. District and not only in the down-town areas of the Central Division.

The Eastern Dump

This Dump is the "universal recipient" of all refuse not only from the City but also from certain adjoining areas in the County of St. George West.

It is here that all the trucks and carts of the City and its immediate neighbourhood find their way to empty their contents, and this they do in a most irregular, unsatisfactory, and unhealthy manner.

The Eastern Dump is under the control of the Transport Train and all that the Public Health Department can do is to advise and invariably our advice is only half-heartedly heeded. The Dump is in a most unsightly and unsatisfactory condition, if not, fortunately, in a most insanitary state. There are no hard and firm roads to the edge of the Dump, and as a direct result refuse is dumped in a most irregular and helter-skelter fashion and no "controlled tipping" whatsoever is practised. The refuse is not levelled out, nor is it covered with a layer of earth as the Public Health Department has so often advised. As a consequence fly breeding is not uncommon, and but for occasional fires and the continuous attention of the Anti-Rat Unit of the Public Health Department rat nuisance would be greater.

I must repeat that the Dump should be levelled off by nothing less than a full-size bulldozer fitted with compressing equipment; hard roads should be built right up to the very edge of the Dump and refuse dumped on the advancing face, and after levelling out and raking, immediately covered with at least a six-inch layer of earth. Particularly must the various trucks and carts belonging to private firms, &c., be made to obey the rule that they must transport their refuse to the very edge of the Dump and must not, under any circumstances empty their contents at the nearest spot that suits them. In fact we are convinced that the Dump will never be put and kept in the sanitary way that it should be kept, and that controlled tipping will never be properly practised, as it is absolutely essential that it should be, unless the Dump is placed under the control of the Public Health Department.

SANITARY INSPECTION OF THE DISTRICT

Premises and Occupations Controlled by Bye-laws and Regulations

FOOD

For some years now the Public Health Department has been pursuing an intensive clean food campaign designed not only to ameliorate the unsatisfactory food situation that once existed and still, to a certain extent, exists in the Urban Sanitary District, but also to secure a clean, wholesome, and palatable product that can be relied upon to be free from contamination of any kind and which can be consumed without the slightest fear of acquiring any of the bowel-filth diseases that were at one time so common.

That a good measure of success has been achieved can be judged by the fact that the number of cases of typhoid fever, dysentery, diarrhoea and enteritis have shown a marked decline and the various measures which have been recommended to protect food from contamination with dirt, dust, flies and vermin are now being almost universally adopted by all food vendors within the Urban Sanitary District.

Whereas in the past it was an uncommon experience for food vendors and particularly itinerant vendors to have covered trays and protected utensils as well as clean clothes with uniforms and aprons, the importance of these very desiral le requisites is nowadays so greatly appreciated as a means whereby better monetary returns can be secured that they are being provided as a matter of regular routine.

Whilst, however, the progress that has been made in this most important aspect of public health work can be described as gratifying, yet there remains much more to be done before the food that is being prepared and sold in this City can be considered good, clean, and entirely wholesome.

A tour of the various down-town restaurants, cookshops, and parlours will make this only too evident; the visitor would be astonished to find such varying standards and he would be at a complete loss to understand why. The answer would appear to be found in the varying food habits of the number of races that constitute our cosmopolitan down-town population. Here one may find Indian restaurants, Chinese parlours, Creole cookshops, Venezuelan hotels, Portuguese shops, each with a standard of its own, each with a special way of treating and preparing food, each with its own individual method of serving and selling food, and when one couples this with the fact that the premises themselves are almost invariably old and dilapidated, dusty and badly kept, it is not surprising that this problem seems almost insoluble, and a keen sense of disappointment is experienced.

Still even here it is possible to register progress and as newer buildings replace the older and worn out shops and parlours, newer and better standards are enforced on premises which have been constructed for the specific purpose of, and provided with the necessary equipment for, preparing, selling and serving food, and which have been supplied with all the necessary sanitary conveniences that conduce to that end.

It is not redundant to repeat in this report once again that it pays to be clean and that a clean and hygienic foodshop in which the food is good, clean, and wholesome, is adequately protected from contamination, and where the waiters and waitresses are all obviously in good health, free from infectious or contagious disease and are properly and decently clad with uniforms, is a fruitful source of income, and money invested in such projects never fail to pay quick and substantial dividends.

Sale of Foodstuffs Bye-Laws

REGISTRATION OF SHOPS, ETC. (1952)

Provision, mea	at, and spirit	_		nts, hote	ls, refresl		4.41
Ground provis	ion and fruit	t alsona	•••	***	•••	•••	441
Bakehouses		~	•••	•••	•••	•••	48
		•••	•••	***	•••	•••	17
Confectionery		•••	•••	•••	•••	•••	1
Aerated water		•••	•••	•••	•••	•••	2
Other factorie	s	•••	•••	•••	•••	•••	9
r	Total 1952		•••				518
7	Fotal 1951		•••	•••	•••		442
	Protec	TO A CITATION	r of Ver	ndors (1	059)	_	 -
D 1 1 1		INATION	LELY TO	(I) eacur	50 <u>2</u>)		
Bread and cak		•••	•••	•••	•••	•••	13
Confectionery	·	•••	•••	•••	•••	•••	12
Cooked food in	acluding fries	s, souse,	&c.	•••	•••	•••	70
Ice cream and	palets	•••	•••	•••	•••	•••	29
Sweet drinks				•••		•••	12
Vegetables, gr	eens. fruits			•••			97
Miscellaneous	20115, 11 0105					•••	42
Miscenaneous	•••	•••	•••	•••	•••		± <i>4</i>
	Total 198	52		•••	•••	•••	275
						_	
	Total 195	51	•••	•••	•••	•••	253
Number of oys						100 VV 13 24	(2—1951)
			ilk Bye-				
	DATRIE	S AND A					
		10 111111111	MILK SHO	PS (1952)		
Col Distric			MILK SHO	PS (1952))		hed Licence
Sub- $Distric$		10 111110 11	MILK SHO	PS (1952))		hed Licence Issued
City proper	cts			Ps (1952			
City proper East Dry River	cts 		 	DPS (1952 	··· ···		
City proper	cts 			 	··· ··· ···		
City proper East Dry River	cts r (unsewered wered))			•••		Issued
City proper East Dry River Belmont (unsev	r (unsewered wered) ewered, but)			•••		Issued
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City proper East Dry River Belmont (unsex Woodbrook (se sewerage sy St. James (unsex milk Dairymen's lice milk Mand Out-districts	cts r (unsewered wered) ewered, but ystem) ewered) Total 195 Total 195 DAIRY ences issued Total 195 Total 195	premise 2 1 to cowk to shop 2 1 's Licen Milk Ve	es not a LICENCES teeper's a ps, milk ances ani	s (1952) and other bars and BADGES Cows	cted with cted with cr purveyo d refresh s (1952) Tubercula Tested	ors of	1
City proper East Dry River Belmont (unsex Woodbrook (se sewerage sy St. James (unsex milk Dairymen's lice parlours Mand Out-districts of-Spain	cts r (unsewered wered) ewered, but ystem) ewered) Total 195 Total 195 DAIRY ences issued Total 195 Total 195	premise 2 1 to cowk to shop 2 1 's Licen Milk Ve Licer 7	es not a LICENCES teeper's a ps, milk NCES AND	s (1952) and other bars and BADGES Cows	cted with cted with created with	ors of	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
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FOODSTUFFS SEIZED OR SURRENDERED AND DESTROYED-1952

		Under 1	Part X	of the	Public He	ealth Ordin	ance, C	h. 12 No. 4			
Apples	•••	crates			350	Milk (pres	served)	cans			9,588
						sweeten		cases			20,328
Baking Powe	der	cans			2	unsweeten	ned	cans			2,159
Beans		cans			23	Oats (rolle	ed)	cartons			42
Beet-root	•••	cans	•••		48	·					
Butter (cook	ing)	\dots pounds	•••		356	Onions		\dots bags			48
								crates			10
Cabbages	•••	\dots crates	•••	•••	3	Ovaltine		cans			1
Carrots	•••	crates	•••	•••	3						
~ 1		tins	•••	•••	123	Peas	•••	\dots bags	•••		60
Cakes	•••	quarts	•••	•••	$-\frac{6\frac{1}{2}}{2}$			packages			7
Cheese	•••	cases	•••	•••	77			pounds	•••	•••	114
G 1:		77			0.1	·		tins	•••	• • •	1,030
Condiments	•••	bottles	•••	•••	21	Potatoes	•••	bags	•••	• • •	8
Tairle (Constant		7			1.141			cans	•••	• • •	3
Fish (fresh)		pounds	•••	•••	1,141	D: /		crates	•••	• • • •	27
Fish (preserv	eaj	barrels	• • • •	•••	26	Rice (swee	epings)	bags	•••	•••	130
		cases	•••	•••	39			bottles	•••	•••	6
		pounds tins	•••	•••	135	G		3			
Flour (sweep)	in cal		•••	•••	$\substack{7,661\\77}$	Syrup	•••	\dots bottles		•••	2
Foodstuffs (m		bags cans	•••	•••	207	Tomatain	ioo ond				
r oodstalls (li	iiscei.)	cans	•••	•••	201	Tomato ju Vegetab		oona			395
						vegetan	ne soup	cans	•••	•••	383
Fruits (presen	rved)	cans			7						
Z Terres (Isteres)		packago		•••	ıi						
		pounds			375						
		tins	•••		49	Yeast		pounds			321
Macaroni		cartons			25			··· Iso carrens			0.4.1
Meats (preser	ved)	barrels		•••	$\frac{-5}{2}$						
including c	ornéd and	d cans			1,099						
pickled bee		cases			263						
and ham re	olls,	pounds			1,374						
frozen poul	try,										
fresh pork,		,									
tripe, veal	loaf										

Anti-Rat Measures

The work of keeping down the rat population to reasonable limits remains, inevitably, one of the main pre-occupations of the Public Health Department and every day the routine work continues without any let up whatsoever. In fact the struggle between rat and man remains an incessant struggle and considering that the rat population equals the human population, any slackening in effort must necessarily lead to an increase in the rat population, with the consequent increased damage to man and his environment and increased destruction of the food on which he feeds.

It is, therefore, as important to intensify this work as it is necessary to keep abreast of modern developments and to experiment with newer and better rodenticides.

It is common experience that rats, which are very clever mammals, soon get accustomed to poisons and baits designed to eliminate them and after a time they learn by experience to know and avoid the various means and ways that are employed to get rid of them. It is therefore a matter of supreme importance that newer and different baits are brought into use continuously and more effective and less conspicuous poisons are employed along with these baits.

We have in the past been making use of a variety of poisons like zinc phosphide, arsenious oxide, rod antu, barium carbonate, and occasionally red squills, but latterly we have been concentrating on the use of "warfarin" under the trade name of Dethmor or Sorexa and we have been getting results that can be considered quite satisfactory.

It would appear that rats eat this chemical with great avidity without getting filled or even experiencing any untoward feeling of any kind. At the end of about seven to ten days internal haemorrhage takes place, they develop a great thirst and whilst making for a source of water they die.

Not uncommonly they succumb in some obscure and inaccessible spot making their presence felt by the odour that emanates from their decomposing bodies.

The more rapid poisons are used whenever a knockout blow to a large area infested with rats is desired, warfarin being employed in a subsequent operation to mop up any stragglers that may have been left behind.

A large variety of baits is used by the Department, viz., sugar meal, sausage meat, grated coconuts, commeal, ripe figs, &c., &c., the changes being rung as the occasion demands.

The system of block control and of combined operations is that which is adopted in the downtown areas and in the large warehouses in the Wharf and Customs Area, and the success that attends such large scale operations is often surprising, large numbers of dead rats being collected by the trappers.

Unless, however, preventive measures are applied at the same time as measures aimed at destruction, this work will always remain incomplete and rats will continue to make their appearance even perhaps in increasing numbers.

The elimination of rat harbourages, the proper stacking of bags and bales of foodstuffs, the getting rid of bits and pieces and odd paraphernalia from warehouses, groceries, restaurants, &c. combined with the progressive rat-proofing of all buildings constitutes a public health measure of the first importance in the fight against rat nuisance.

DESTRUCTION OF RATS AND MICE, 1952

Rats caught by trap	pers	•••	•••	•••		29,190
Rats bought	•••	•••	•••	•••	•••	_
Total	•••	•••	•••	•••	•••	29,190
Mice caught and dest	royed	•••				7,329

Examination of Rats by Government Bacteriologist

Rats examined for plague	 •••		 29,190
Rats found infected with plague	 		 -
Immature rats not examined	 	•••	

SPECIES

		Decumanus	Rattus	Total
Males		7,787	1,585	9,372
Females	•••	15,943	3,875	19,818
	Total	23,730	5,460	29,190

Anti-Mosquito Measures

During the year 1952 the customary measures directed to the elimination of mosquito nuisance within the limits of the City were continued, those against mosquitoes of the culicine species which are now standard and which consist of the oiling and elimination of stagnant pools, the filling of depressed areas, the flushing of underground drains, the cleaning and canalising of earthen water-courses, the oiling of cesspits, &c., being carried on as a day-to-day routine by gangs of the Anti-Mosquito Unit.

There is at all times a good deal of work to be done in this direction and close collaboration has to be, and actually is, established with units of the City Engineer's Department with a view to early detection and speedy elimination of mosquito nuisance due to gaps in the scavenging system. A problem of some magnitude is presented by the reclaimed lands south of Wrightson Road and Mucurapo Road where collections of stagnant water abound due to the poor drainage system existing there and due to various depressions which have been created by the former occupants, and by builders and contractors who often make use of this area as a dump and as a source of earth and sand.

Aided by the shelter of the thick undergrowth, mosquitoes, particularly of the culex species, but also aedes and anophelines breed out here quite rapidly and often are a cause of nuisance to the adjoining residents on the North of Wrightson Road.

Regular oiling of these lands has to be undertaken and the money spent on temporary oiling could very well be spent on permanent works directed to the proper layout of the area in question.

In so far as specific measures against the aedes species of mosquitoes are concerned, the antiaedes unit continued in the year under report their DDT larvicidal work in the various zones in which the City is divided.

Supervisors and anti-aedes inspectors persisted in their house to house visits searching for the breeding places of aedes aegypti and applying as they go along a solution of wettable DDT powder as a larvicide.

The success which attended this campaign, whilst considered satisfactory, in so far as the keeping down of the aedes index was concerned, was not particularly gratifying in eliminating this species of mosquito and each cycle seemed to produce its own particular crop of new potential and actual breeding places and so one never seemed to be able to get down to and remain at an index of zero by this method.

It was, therefore, imperative that this work be supplemented with the DDT residual spraying of buildings by means of a five per cent. kerosene solution of DDT and this particular project got under way at the beginning of the current year; and as I write this report nearly all the buildings within the Urban Sanitary District have already been treated in this manner.

Inspection of Eaves, Gutters, Etc., 1952

Number of inspections of premises (Anti-Mosquito Unit)			118,415
			17,024
Number of occasions found in good order			12,989
Number of occasions found defective			4,035
Number of occasions found containing water only			1,529
			363
*Number of occasions mosquito larvae were found in	tubs,	anti-	
6			8,200
			19,470

N.B.—*Occasions on which mosquito larvae were found by sanitary inspectors, during the course of 107,137 inspections of premises, are included in above figure.

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					remises with mosquito tarvae				
					per	\cdot cent. of	number	visited	
Yearly average	1938-1942	•••	•••	•••	•••	2.]			
	1943					3.3	}		
	1944					5.4			
	1945					6.9)		
	1946				•••	7.3	}		
	1947		•••	•••		5.8	}		
	1948				•••	4.4	:		
	1949	• • •			•••	4.4	:		
	1950	•••				4.6			
	1951	•••				4.5	3		
	1952					3.8			

Premises used for human habitation, Houses let in Lodgings, Common Lodging Houses

Again I regret to have to report that the housing situation in the City of Port-of-Spain continues to deteriorate and may now be considered intensely acute, very few dwelling houses having been erected during the year under report and none whatever for members of the working classes specifically. In addition very little repair to dwelling houses has been taking place, landlords preferring to do nothing at all when they are not permitted to reconstruct because of the inability to get alternative accommodation for their tenants. In fact only those essential repairs and replacements have actually been done that have been made the subject of Statutory Notices which often have to be prosecuted in Court before any work is executed. The result of all this is that nearly all dwelling houses in the Urban Sanitary District are in some state of disrepair and some buildings are in such bad shape that they lean and sag and are often on the point of collapse.

In fact a few buildings, happily only a very few, have actually collapsed during the year under report without damage, fortunately, to their occupants who, however, have had to resort to the good office of family and friends and even sometimes the public authorities for shelter.

No Slum Clearance took place during 1952 and the new blocks of flats which were due to be erected in the upper George Street, Nelson Street area and for which a provision of \$100,000 was made in the Estimates for 1952, were not proceeded with during that year but were started early in 1953 and at the time I write are well on the way to completion.

Lack of alternative accommodation is responsible for holding up the clearing of privately owned property in the declared slum clearance areas and landlords who are anxious to reconstruct their buildings are prevented from doing so by the inability to find alternative housing accommodation for the numerous tenants that overcrowd these buildings, and the Planning and Housing Commission are not in a position to render any assistance whatsoever. In fact the Commission themselves are running what is more or less a large barrack in Ajax Street which was meant to be used solely as a "decanting centre" but which has not succeeded in "decanting" anybody within the last few years.

Building, however, is going on actively in Port-of-Spain, but the buildings that are going up are predominantly business places and it is still a gratifying experience to take a walk down Frederick Street and other down-town streets and take a look at the renovated stores and other business places which have practically changed the appearance of this part of the City. Nearly every single individual merchant has been able to add, alter or even to reconstruct his store or business place and a modern "new look" has been added to every one of the down-town buildings.

Whilst this is a very satisfying state of affairs public health officers cannot but feel disappointed that so little has been done to ameliorate the congestion and overcrowding that has been taking place during the past twenty years.

Some money has been provided in the Estimates for 1953 and also, we are told, in those for 1954, but this is just a drop in the ocean and a much more serious appraisal of the situation and a much more realistic attitude to the potential dangers inherent in this problem is urgently necessary both by Government and people alike.

VITAL STATISTICS OF THE DISTRICT

Comparative Summary of Vital Statistics

(Unless otherwise stated, rates are per 100,000 population)

				1921	1950	1951	1952
Area of City—acres (pastures	and o	pen space	es				
$\operatorname{included}$)	•••	•••	•••	1,793	$2,\!550$	$2,\!550$	2,550
Estimated populatio	n (mea	n)		61,386	104,311	107,009	109,384
Density of populatio	n (per	sons per a	acre)	34.2	41	42	43
Total live births			•••	1,687	3,905	3,982	4,115
Birth rate				2,728	3,745	3,723	3,761
Still births registered	l			154	165	193	207
*Still birth rate				91.3	42.25	48.47	50.30
Marriages registered			•••	534	948	1,031	1,027
Marriage rate		•••	•••	864	909	964	939
Total deaths			•••	1,659	1,170	1,243	1,094
Death rate		•••	•••	2,683	1,122	1,162	1,000

^{*}Per 1,000 births.
Census population of City—April, 1946: 93,198.
Estimated population of City to 31st December, 1952: 110,495.
Colony's Mean Population: 657,727

Vital Statistics of the District-Continued

Comparative Summary of Vital Statistics

(Unless otherwise stated, rates are per 100.000 population)

				1921	1950	1951	1952
	Natural increase of population	ı		28	2,735	2,739	3,021
	Deaths under one year	•••		287	168	167	137
	*Infant mortality rate			170.12	43.02	41.94	33.29
	*Maternal mortality rate	•••	•••		2.30	2.51	1.70
De	ath Rates :						
	Notifiable infectious diseases			621	124	113	111
	Pulmonary tuberculosis		•••	249	53	25	26
	Tuberculosis (other forms)		•••	26	13	7	11
	Enteric fever			125	3	5	7
	Pneumonia (all forms)			197	52	75	66
	Bronchitis			136	16	21	16
	Diphtheria	•••		2	3	1	1
	Malaria		•••	89		1	
	Syphilis:			21	8	10	5
	Diarrhoea and enteritis			191	35	39	36
	Influenza			26	4	4	
	Ankylostomiasis			15	_		
	Bright's disease and nephritis			209	23	27	25
	Diseases of the heart and bloc	d vessel	ls	265	264	295	226
	Diseases of the nervous system	n includ	ing				
	cerebral haemorrhage		•••	170	129	141	129
	Cancer and other malignant d	iseases		63	89	94	82

Acreage and Population

The Urban Sanitary District encloses an area of 2,550 acres of which the open space of the Queen's Park Savannah occupies 279 acres.

The reclaimed lands south of Wrightson Road Proper in the Kings Wharf and Docksite areas are now definitely included within the limits of the City and occupy an area of 168 acres. No addition to the acreage of the City has been made within recent years though it is not unlikely that the suburbs of St. Ann's and Maraval, and lands adjoining the eastern limits of the City just outside the proposed new municipal area of Barataria will be included in the near future.

The resident mean population, i.e. the population estimated to the end of June 1952 showed an increase of 2,375 souls on the figure for the year 1951; i.e. 109,384 as against 107,009, though the natural increase of population was 3,021 souls.

The estimated population of the City to 31st December 1952 was 110,495 souls, and the Colony's mean population was estimated to be 657,727 souls.

The population of the City in April 1946, when the last census was held, was found to be 93,198 souls.

Births and Birth Rates

Though the birth rate showed a very slight rise to 3,761 from 3,723 per 100,000 population this can hardly be considered significant.

The birth rate reached the peak figure of 4,281 per 100,000 population in 1947 and since then has been falling steadily in the same way that the death rate has been showing a welcome reduction since the year 1942.

A falling birth rate in these parts is not an unfavourable phenomenon, and the high birth rate in the Caribbean, which has been the subject of so much discussion and of so much evil foreboding, would appear to be finding its own solution by natural means without the active intervention of the experts, such as it has been known to do in other countries of the civilized world.

Deaths and Death Rates

The death rate for 1952 which was estimated to be 1,000 per 100,000 population is a figure that many more advanced and more fortunate countries, from a point of view of financial resources, would like to record.

In fact there are not many cities in the civilized world which can boast of a lower death rate and it serves to indicate that the various public health measures which for years now have been put and are being put into practice by the Local Authority as well as the various other public health and social services which are being provided within the City by Government and voluntary organisations are beginning to bear fruit, and are beginning to be reflected in the better general health and sanitation of the Urban Sanitary District and in the improved personal health and longer life of the citizens as a whole.

Census population of City—April, 1946: 93,198. Estimated population of City to 31st December, 1952: 110,495. Colony's Mean Population: 657,727.

^{*}Per 1,000 births.

It is interesting to note that these lowered death rates are being recorded at a time when economic difficulties continue to press upon the residents of the City, and when the high cost-of-living index, and the difficulty in obtaining essential basic foodstuffs at a cost within the reach of the humblest pocket are combining to throw a great strain on the daily life of all and sundry.

It is customary and also of some value for purposes of comparison to sort out the deaths in the various sub-districts of the City, and when this is done for the year under report the well known and often referred-to fact once again emerges, viz., that the highest death rate occurred in the East Dry River Sub-District where the death rate worked out to be 1,059 per 100,000 population.

It is true that a death rate of 2,242 per 100,000 was recorded in the St. James Sub-District but this was due to the fact that 142 deaths took place in the House of Refuge, a very large proportion of which were of persons who were never resident in St. James.

Only 72 deaths of residents in the Woodbrook Sub-District were registered in the year under report, which gives a death rate of 526 per 100,000, the lowest rate in the whole Urban Sanitary District.

	Bi	rths 1952			Deat	hs 1952	
Males	Females	Both Sexes	Birth Rate per 100,000 population	Males	Females	Both Sexes	Death Rate per 100,000 population
2,086	2,029	4,115	3,761	558	536	1,094	1000

Deaths in Sub-Districts of the City 1952

Sub-Dist	DICT	Mean Population		DEA PLACE OF O			Total Deaths in Sub-	Rate per 100,000 population
50 B -2131		Lopalation	Home, &c.	Colonial Hospital	Royal Gaol	House of Refuge	Districts	population
City Proper	•••	 37,635	137	120	4		261	693
St. Clair		 1,834	17	4			21	1145
East Dry River	•••	 24,278	134	123	_		257	1059
Belmont		 18,914	117	77			194	1036
Woodbrook	•••	 13,880	49	24		<u> </u>	73	526
St. James	•••	 12,843	83	63	-	142	288	2242
Тота	L	 109,384	537	411	4	142	1,094	1000

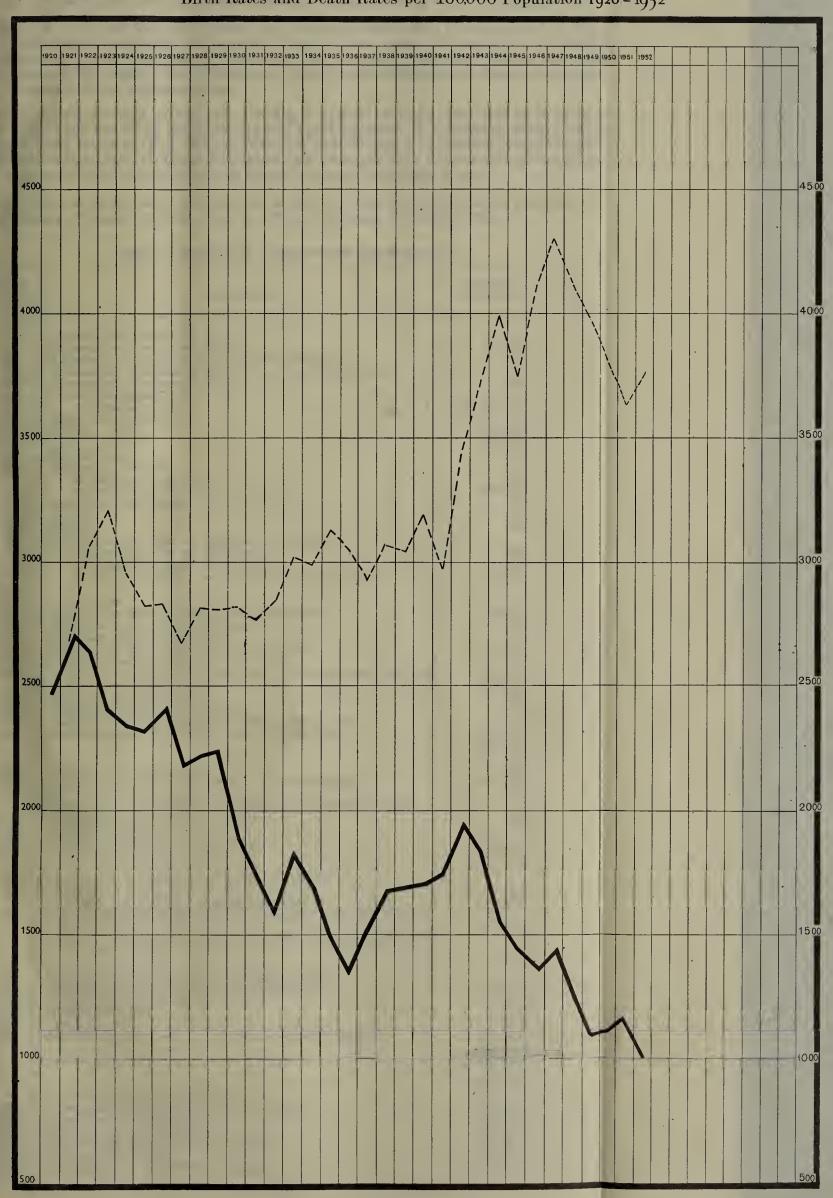
Age Distribution of Deaths 1952

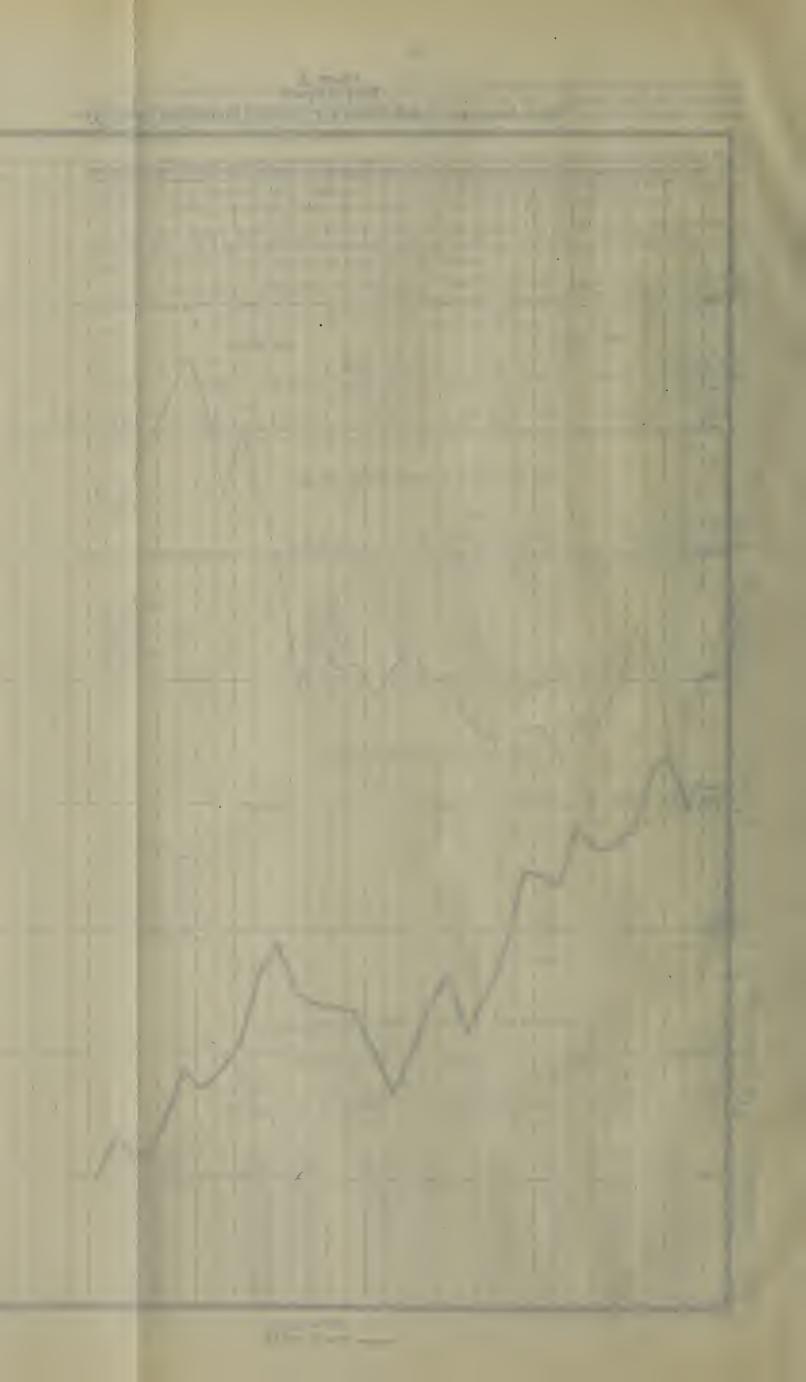
	Period				Males	Females	Both Sexes	Percentage of Total Mortality at All Ages
Under 1 year	•••				82	55	137	12.52
1- 5 years	•••	•••			27	21	48	4.39
6-10 do.					7	1	8	0.73
11–20 do.	•••	•••			14	12	26	2.38
21–30 do.	•••				17	16	33	3.02
31-40 do.		•••			40	24	64	5.85
41-50 do.					56	38	$9\overline{4}$	8.59
51-60 do.	•••				78	66	144	13.16
Over 60 years	•••	•••	•••	•••	237	303	540	49.36
	TOTAL				558	536	1,094	

Comparison of Deaths at different Age periods, 1928-52

		Total Deaths		THS UNDER		DEATHS -5 YEARS	_	DEATHS 60 YEARS		ATHS OVER O YEARS
Period .		at All Ages	No.	Percentage of Total Deaths						
Yearly Averag	es									
1928-32]	1,327	230	17.42	81	6.06	94	7.09	336	25.10
1933-37		1,167	215	18.24	62	5.29	87	7.57	289	$\frac{23.10}{24.74}$
1938-42		1,622	275	16.85	68	4.21	117	7.20	566	34.92
1943		1,862	283	15.20	102	5.48	131	7.04	674	36.20
1944		1,620	248	15.31	77	4.75	106	6.54	598	36.92
1945		1,526	239	15.66	71	4.65	86	5.64	561	36.76
1946		1,396	241	17.26	77	5.52	95	6.81	493	35.32
1947		1,385	231	16.68	49	3.54	92	6.64	536	38.70
1948		1,191	177	14.86	45	3.78	66	5.54	491	41.23
1949		1,147	171	14.91	57	4.97	85	7.41	524	45.68
1950		1,170	168	14.36	75	6.41	76	6.50	526	44.96
1951		1,243	167	13.43	43	3.46	79	6.35	602	48.43
1952	•••	1,094	137	12.52	48	4.39	77	7.04	540	49.36

Chart A
Port of Spain
Birth Rates and Death Rates per 100,000 Population 1920-1952





Causes of Deaths

It will be noticed, when the table listed hereunder is compared with similar tables that appear in previous annual reports, that a new classification of causes of deaths has been adopted.

This is due to the fact that the International Statistical Classification (Intermediate List of 150 causes for tabulation of morbidity and mortality) has now been adopted for the Colony of Trinidad and Tobago, and in order that effective comparison may be made with other countries where this list is in operation, the causes of deaths have been detailed and numbered in the manner shown hereunder in keeping with the intermediate list.

The same facts, however, emerge, viz., the largest number of deaths, 247, were attributable to diseases of the heart and blood vessels though this figure represents a substantial decline, 68 on the figure for 1951, which was 315. Second on the list were diseases of the nervous system including cerebral haemorrhage with 141 deaths, and cancer and other malignant diseases with 90 deaths was third. Diseases of early infancy claimed 80 deaths as against 106 deaths in 1951.

Fewer deaths from all causes were recorded in the year under report than in the year 1951, and the total number of deaths 1,094 was lower by 149 than the figure of 1,243 for 1951.

Causes of Deaths 1952—(International Classification)

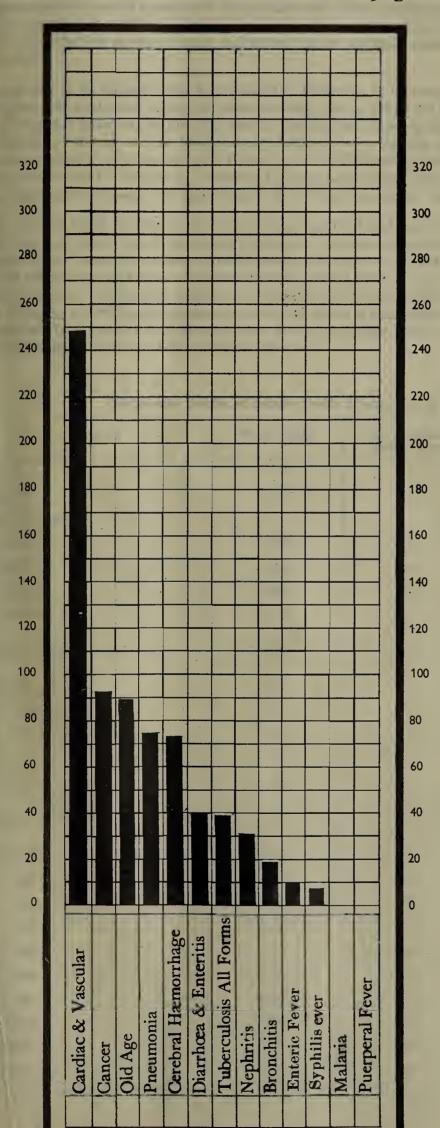
ntermediate List No.	Cause Groups		Detailed List No.	Total
Al	I—Infective and Parasitic Diseases Tuberculosis of respiratory system		001-008	28
A2 A3, A4	Tuberculosis of menniges and central nervous system Tuberculosis of intestines, peritoneum and mesenteric glands Tuberculosis of bones and joints		$010 \\ 011 \\ 012$	5 1 3
A5	Tuberculosis other forms:		014, 016-019	3
A6 A10	Congenital Syphillis		$020 \\ 022, 023, \\ 026-029$	5
A12 A16	Typhoid fever		040	8
A20	01 Bacillary dysentery		$045 \\ 047, 048 \\ 053$	$\begin{bmatrix} 2\\1\\8 \end{bmatrix}$
A21 A26	Diphtheria	:::	$\begin{array}{c} 055 \\ 061 \end{array}$	$\frac{1}{3}$
A43	All other diseases classified as infective and parasitic: 01 Lymphogranuloma venereum 02 Granuloma inguinale, venereal		$\begin{array}{c} 037 \\ 038 \end{array}$	1 1
	25 All other diseases classified as infective and parasitic		132–134	1
A44 A45	II—Neoplasms Malignant neoplasm of buccal cavity and pharynx Malignant neoplasm of oesophagus		140–148 150	4 2
A46 A47 A48	Malignant neoplasm of stomach Malignant neoplasm of intestine, except rectum Malignant neoplasm of rectum		$151 \\ 152, 153 \\ 154$	$\begin{array}{c} 23 \\ 13 \\ 3 \end{array}$
A50	Malignant neoplasm of trachea and of bronchus and lung specified as secondary	not	162, 163 170	$\frac{1}{10}$
A51 A52 A53	Malignant neoplasm of breast Malignant neoplasm of cervix uteri Malignant neoplasm of other unspecified parts of uterus		$\begin{array}{c} 171\\172174\end{array}$	5 12
A57	Malignant neoplasm of all other and unspecified sites	•••	$155-160 \\ 175, 176 \\ 199$	16
${}^{\mathbf{A58}}_{\mathbf{A60}}$	Leukaemia and aleukaemia Benign neoplasms and neoplasms of unspecified nature		$204 \\ 210-239$	1 4
A62	III—Allergic, Endocrine System, Metabolic and Nutritional Disease Thyrotoxicosis with or without goitre	8	252	1
A63 A64	Diabetes mellitus		260 283–286	10
	IV—Diseases of the Blood and Blood Forming Organs			
A65 A66	Anaemias: 03 Other specified and unspecified anaemias Aller ic disorders, all other endocrine, metabolic and blood disea	ses:	292, 293	7
	01 Asthma		$\begin{array}{c} 241 \\ 253 \end{array}$	1
A 17.0	VI—Diseases of the Nervous System and Sensory Organs Vascular lesions affecting central nervous system		330-334	77
A70 A71 A72	Nonmeningococcal meningitis		$\begin{array}{c} 340 \\ 345 \end{array}$	7 1 2
A73 A78	Epilepsy All other diseases of the nervous system and sense organs		353 341-344 350-352 354-357 360-369 395-398	54
A81	VII—Diseases of the Circulatory System Arteriosclerotic and degenerative heart disease		$420-422 \\ 430-434$	98 47
A82 A83 A84	Other diseases of the heart		440–443 444–447	9 7
A85 A86	Diseases of arteries		450–456 460–468	85 1

Causes of Death-(International Classification)-Continued

ntermediate List No.		Cause Gro	ups				Detailed List No.	То	otal
•	VIII—Diseases of the Re	reminatory Syste	m						
A89	Lobar pneumonia	\cdots	••••				490		15
A90	Broncho pneumonia Primary atypical, othe	and unergo	fied nne		•••	•••	491 $ 492, 493$		$\frac{51}{6}$
$\begin{array}{c} \mathbf{A91} \\ \mathbf{A93} \end{array}$	Bronchitis, chronic an	d unqualified	med bue	···	•••		501, 502		18
A95	Empyema and abscess	of lung	•••	•••	•••		$518,521 \\ 519$		$\frac{1}{6}$
A96 A97	Pleurisy All other respiratory of	 liseases	•••	•••			511-517 $520-522$		16
							$520-522 \\ 524-527$		
A99	IX—Diseases of the Dige Ulcer of stomach	estive System					540		5
A100	Ulcer of duodenum		•••		•••		541 551		$\frac{1}{2}$
$\begin{array}{c} \textbf{A102} \\ \textbf{A103} \end{array}$	Intestinal obstruction	and hernia	•••	•••			570		8
A104	Gastro-enteritis and c 01 Gastro-enterit	olitis, except d	iarrhoea etween 4	a of the ne 4 weeks ar	w born: 1000	s	571.0		32
	02 Gastro-enterit	is and colitis, a	${ m ges} \; 2 \; { m ye}$	ears and o	ver	·	571.1		8
$\begin{array}{c} A105 \\ A107 \end{array}$	Cirrhosis of liver Other diseases of dige	stive system					· 581 5 3 6–539		$\frac{10}{18}$
11101	Other diseases of dige	Stre System					542-544		
							545 5 73 –580		
							582-583 586-587		
A109	X—Diseases of the Genit	o-Urinary Syst	em						
$\begin{array}{c} A110 \\ A112 \end{array}$	Chronic and other uns	specified nephr	itis	•••	•••	•••	$\begin{array}{c} 591 – 594 \\ 600 \end{array}$		$\frac{27}{2}$
A112 A113	Infections of kidneys Hyperplasia of prosta	te					610		5
A114	Diseases of breast 03 All other diseases of	of the genito-u	 rinary s	vstem			$621 \\ 601-603$		$\frac{1}{25}$
	OF All Other diseases	or the genro-a	illically s.	yscom			605-609		
							611,612 $614-617$		
							622 - 623		
	XI-Deliveries and Co	mulications of	Preana	ncu. Chile	lbirth, an	nd the	635–637		
	Pucrperium				,		644	1	;
A117	02 Haemorrhage of pr	regnancy and c	eniiabirt	h	•••		670-672		
A119	Abortion with sepsis		Jhinth o	nd the nu		•••)	$651 \\ 648$	Ì	
A120	04 Complications of p	regnancy, chiic	abirth a	na the pu	erperi u m		040		
	XIII—Diseases of the B	Cones and Organ	as of Me	mement					
A122	Arthritis and spondyl	itis					720-725		2
$\begin{array}{c} A123 \\ A126 \end{array}$	Rheumatism unspecif All other diseases of t	ied he skin and m	 usculosk	eletal sys	tem:	•••	727		
21120	01 Chronic ulcer	of skin		•••	•••		715		:
A127	XIV—Congenital Malfo	rmations					751		
A127 A129	All other congenital r	nalformations		•••	•••		752		
	XV—Certain Diseases of	f Early Infanc	y				E60		
$\begin{array}{c} A131 \\ A132 \end{array}$	Post-natal asphyxia a Infections of the new	ind atclectasis born:	•••	•••	•••	•••	762		1
	01 Diarrhoea of 1	newborn (unde	r 4 week	(s)		• • • •	764		
A134	All other defined dise 03 Nutritional m	aladjustment					772		1
A135	Ill-defined diseases pe	culiar to early					773, 776		4
	unqualified .		•••	•••	•••	•••	770, 770		-
	XVI—Symptoms, Senila	ity and Ill-defin	red Cond	ditions					
A13 6	Senility without men	tion of psychos	sis	•••	•••		794		8
	12 Nervousness a 14 Uraemia unqu	and debility	•••	•••	•••		$\begin{array}{c} 790 \\ 792 \end{array}$		
	15 Ill-defined an	d unknown car	uses of n		•••		795		3
	" N " XVII—Code Alte and Violence (Natu	ernative Classij	fication	of Accider	nts, Poiso	mings,			
AN138			•••				N800-N804		
AN139	Fracture of spine and	l trunk					N805-N809	-	
AN140				···	•••	•••	N810-N829		
AN144	Internal injury of che	est, abdomen a	nd pelv	is	•••	•••	N860-N869		
AN145	Laccration and open	wounds	•••	•••	•••		N870-N908		
AN148	Burns .			•••			N940-N949		
AN149	Effects of poisons .						N960-N979		
TTT 1 TO	_						N950-N959		
ANTICO	All other and areas	find offerte of	ovtomel	0911000					
AN150	All other and unspec	ified effects of	external	causes	•••	•••	N980-N999		

Chart B Port of Spain

Principal Individual CAUSES OF DEATHS 1952



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Causes of Deaths under 1 year, 1952

Causes of Dea	iths			Neo-Natal Deaths under I month	Deaths 1 month and under 1 year	Total	Percentage o Total Infant Mortality
nte-Natal Causes : Prematurity				27	2	29	+
Marasmus	•••	•••			10	10	
Malnutrition	•••	•••	•••		9	9	
Congenital Abnormalities	•••	•••		3	ĭ	4	No.
Congenital Syphilis	•••				1	1	1
Congenital Heart Disease	•••	•••		3		3	
Anaemia	•••	•••	•••	_	2	2	
Total Ante-N	Tatal	•••		33	25	58	42.34
tra-Natal Causes :							
Haemorrhage	•••	•••	• • • •	2		2	
Total Intra-N	Vatal			2		2	1.46
ost-Natal Causes :			1				
Asphyxia and Atelectasis	•••			14		14	
Pneumonia	•••	•••		3	14	17	
Diarrhoea and Enteritis	•••	•••		2	25	27	
Bronchitis	•••			- 10	4	4	
Icterus Neonatorum	•••	•••	•••	1	_	1	1
Meningitis	•••	•••	•••		$\frac{2}{7}$	2	
Other Post-Natal Causes	•••	•••	•••	5	7	12	
Total Post-N	atal			25	52	77	56.20
GRAND TOTA	L		> .	60	77	*137	

^{*} M. 82; F. 55.

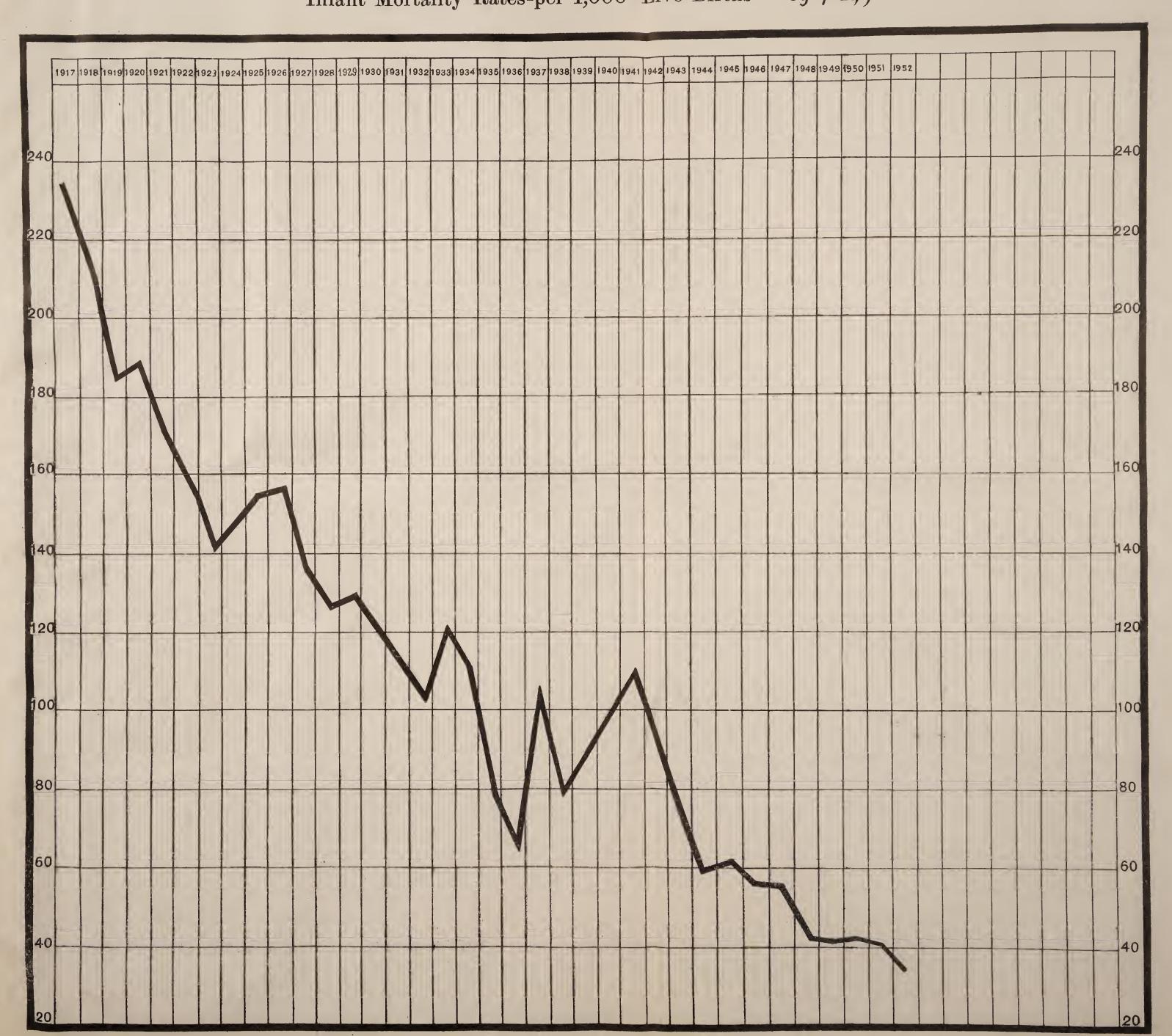
Duration of Life of Infants dying under one year of Age, 1952

Duration of Life			No. of Infants	Percentage of total deaths under 1 year	Corresponding percentage 1951
Under 1 day 1 day and under 2 weeks			16 39	11.68 28.47	13.57 28.14
2 weeks and under 1 month	•••	•••	5	3.64	2.40
Total under 1 n	nonth		60	43.79	46.11
1 month to 3 months			22	16.06	25.75
Over 3 to 5 months	•••		16	11.68	9.58
Over 5 to 7 months			18	13.14	6.59
Over 7 to 9 months			13	9.49	8.38
Over 9 to 11 months	•••		8	5.84	3.59
Over 11 and under 1 year	•••	•••	_	_	-
TOTAL			137		_

Neo-Natal Mortality (Deaths under 1 month) 1930-1952

		Pe	riod			No. of Deaths under 1 month	Percentage of total deaths under 1 year	Neo-Natal Mortality Rate per 1,000 Births
Yearly	Average	: 1930	0-34			90.6	38.60	44.03
Year	1935			•••		91	50.28	39.24
	1936					61	40.94	26.58
	1937			•••		110	46.41	48.39
	1938		•••			117	57.35	45.16
	1939	•••	•••	•••		122	50.41	44.33
Averag	е 1935—	39				100.2	49.08	40.74
Year	1940	•••				132	45.36	44.94
	1941	•••				137	43.63	47.44
	1942			£		134	41.62	39.42
	1943	•••	•••			134	47.35	35.72
	1944	•••		•••		117	47.18	28.12
	1945					126	52.72	31.72
	1946	•••	•••			136	56.43	32.91
	1947	•••	•••	•••		133	57.58	32.20
	1948	•••	•••			76	42.94	18.75
	1949	•••	•••	•••	. • •	82	47.96	20.31
	1950			•••		82	48.82	21.00
	1951		•••	•••		77	46.11	19.34
	1952	•••	•••	•••		60	43.79	14.58

Chart C
Port of Spain
Infant Mortality Rates-per 1,000 Live Births 1917-1952



Still Births

Two hundred and seven (207) still births were reported during the year under report giving a still birth rate of 50.30 per 1,000 live births.

This is a higher rate than that for 1951, which was 48.47 per 1,000 live births.

The causes of the death of infants in their mothers' wombs are almost invariably those morbid conditions that operate during the ante-natal period, and to a lesser extent those accidents and diseases that occur during the period of birth—intra natal causes.

Certain specific diseases like syphilis, chronic nephritis, tuberculosis, diabetes, chronic malaria, &c., operating during the period of pregnancy have an adverse effect on the health of the growing infant in its mothers' womb and may even cause its death. That is why it is so important for the child that mother and father should enjoy the very best of health, and if any specific disease is contracted that it should be actively treated.

Efficient and regular ante-natal care and prompt and skilled midwifery would go a long way towards eliminating those accidents and diseases that occur during confinement and often lead to the death of the infant because of the heroic measures that have inevitably to be adopted.

No mention is made here of criminal abortion because it is not a common cause of still births, and the measures to be adopted to eliminate this wastage of human life are obvious to all.

Still	Births	1	95	2
-------	--------	---	----	---

	Year			Total Still Births	Rate per 1,000 Live Births
1952	• • •	•••		207	50.30
1951				193	48,47
1950				165	42.25
1949				244	60.44
1948				223	55.02
1947				220	53.49
1946				225	54.44
1945		•••	•••	224	56.39
1944		•••	•••1	265	63.69
1943		•••		230	61.32
1942		•••		257	75.61
1941		•••		211	73.06
1940		•••		214	72.86
1939		•••		190	69.04
1938				171	66.00

The Pre-School Child

More attention is now being paid to the pre-school child than was the case 10 to 15 years ago because there exists nowadays greater understanding and appreciation of the importance of this period of the child's life, and of the need for the continuation of efficient care and attention onwards from the end of the first year right up to the beginning of school life at the age of five years.

Certain it is that more dried milk, even if it be skimmed milk, is being distributed to toddlers of this age period at the various child welfare clinics throughout the Colony with corresponding benefit to the health and welfare of the toddler.

The mere bringing of these toddlers to the Clinics is of benefit to them because obvious defects and diseases are noticed by nurse and voluntary worker, and the child is either referred to a doctor or the appropriate treatment administered.

Much more, however, is needed and the establishment of additional creches and nurseries would go a long way towards this very desirable end.

Causes of Death at Ages 1-5-1952

Groups		Group Total	Percentage of Total Mortality at ages 1-5
Diseases, &c., attributable to Ante-Natal Causes: Congenital Heart Disease 1; Malnutrition 2; Marasmus 1		4	8.33
Communicable Diseases: Diphtheria 1; Enteric Fever 1; Pneumonia 14; Tuberculosis 6		22	45.83
Diseases of the Nervous System: Convulsions 2; Tetanus 1		3	6.25
Diseases of the Respiratory System: Atelectasis 1; Bronchitis 1; Pulmonary Congestion 3		5	10.42
Diseases of the Digestive System: Diarrhoea and Enteritis 8; Intestinal Obstruction 1		9	18.75
Other Causes: Burns 1; Cachexia 1; Nephritis 2; Gasolene Poisoning 1		5	10.42
	1	*48	

Maternal Mortality

It is of some importance to pause and consider the causes of maternal deaths such as they occur in the Urban Sanitary District, for the loss of infants and mothers is a wastage that should be avoided on general humanitarian grounds apart altogether from the fact that pregnancy and confinement are physiological functions and as such should, like other physiological functions, entail no disease, injury or death.

Besides, a child and mother saved might very well be the means whereby greater benefits, greater welfare, and greater happiness are made to accrue to the community.

During the year under review 7 mothers died during pregnancy and confinement giving a maternal mortality rate of 1.70 per 1,000 live births, the lowest maternal mortality rate recorded since 1948 when the rate was 1.23 per 1,000 live births.

Of the diseases listed in the table given hereunder, haemorrhage was responsible for the largest number of maternal deaths, namely, three.

Causes of Maternal Deaths, 1952

	1	10 10 10	20.	9.6 - J	m-+-1	Rate per l	,000 Births
Causes of Maternal Deaths	Under	16 16 to 25	26 to 35	36 and upwards	Total All Ages	1952	Average 1947-51
Puerperal Sepsis Eclampsia	=	_	=				$0.25 \\ 0.30$
Haemorrhage	=	- 1	2	1	3	0.73	0.40
Pernicious Vomiting *Other Causes	:::, =		3	2	4	$0.\overline{97}$	1.35
Total		- 1	5	3	7	1.70	2.30

^{*} Other Causes include Abortion with sepsis and tetanus 3; Ruptured Uterus 1.

PREVALENCE OF AND CONTROL OVER INFECTIOUS DISEASES

Notifiable Infectious Diseases

No new infectious disease was added during the year under report to the infectious diseases which have been declared notifiable under Part XIV of the Public Health Ordinance, Ch. 12. No. 4, and they remain 20 in number such as they have been since July, 1941 when puerperal fever was, by proclamation, added to the list.

It is of some importance to keep an eye on the numbers of cases of infectious diseases which occur in a Sanitary District as they do furnish some kind of indication of the relative health and sanitation prevailing in that District.

Measures either to prevent the occurrence of infectious diseases or to limit their spread must be kept up-to-date and promptly applied if the disease is not to gain a foothold and cause disability or death to large numbers of the population.

It is satisfactory to be able to record that the number of cases of infectious diseases notified in the Urban Sanitary District has been showing a steady and consistent decline ever since the establishment of the Local Authority and the same thing can be said of the number of deaths certified to these diseases, as an examination of the table listed below will show.

During the year under report 378 cases of notifiable infectious diseases were reported to the Public Health Department and 121 deaths certified as compared with 392 and 121 respectively in the previous year.

Of this number pulmonary tuberculosis claimed the largest number of notifications, 147, with chicken pox, 94, second and pneumonia, 68, third on the list; of the 121 deaths, pneumonia was responsible for 72 and pulmonary tuberculosis 28.

A mild outbreak of chicken pox of which 94 cases were notified was largely responsible for the 378 notifications received.

Of great interest is the much lowered number of deaths certified to pulmonary tuberculosis which, though one more than the year before, was about one-third the number certified to this disease in previous years.

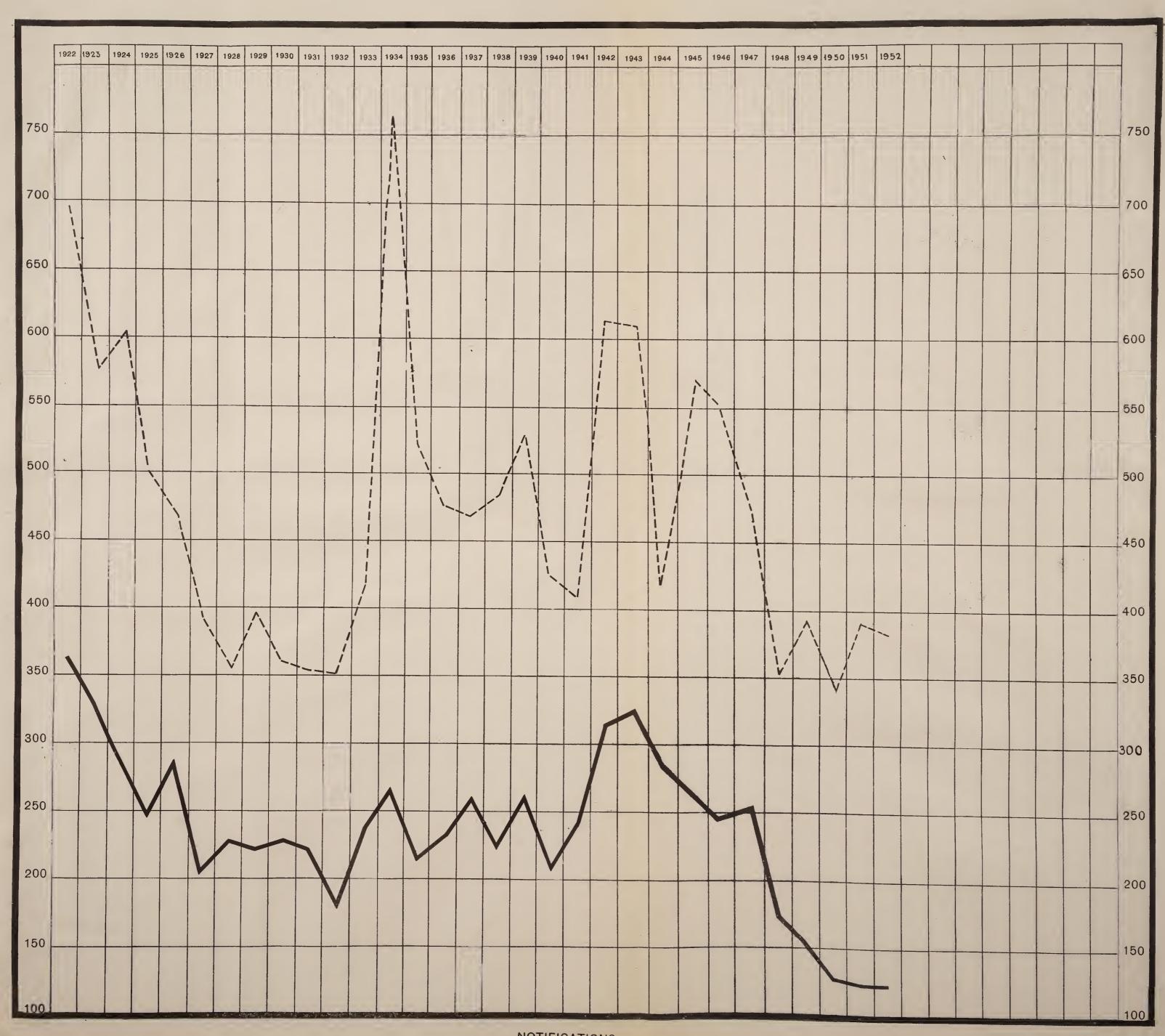
The number of cases of enteric fever notified was 32, the same number as in the year before, but deaths certified were 8, 3 more than in the year 1951 when 5 deaths from enteric fever were recorded.

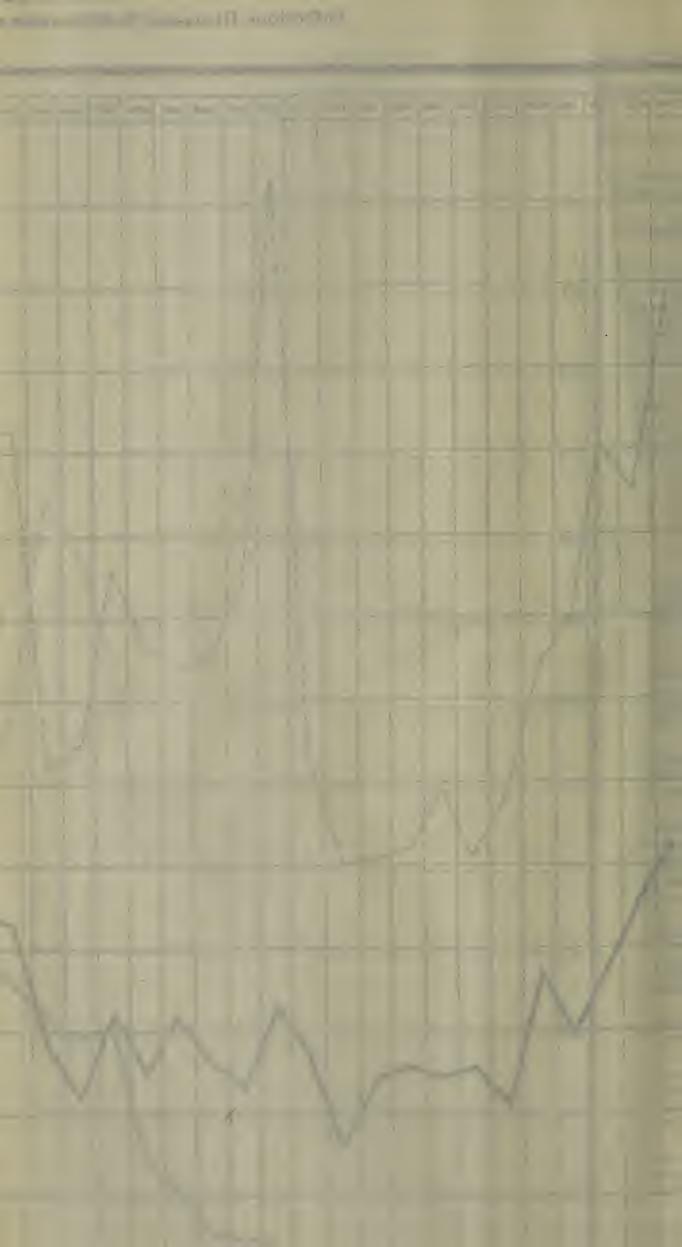
It is also interesting to note that more deaths, 72, were certified to pneumonia than there were cases of pneumonia notified, 68, which proves conclusively that pneumonia is a disease that is "badly notified" seeing that the case mortality of the untreated disease is nowhere near 100 per cent. apart altogether from the fact that the modern sulpha drugs and penicillin have such made a great difference for the better in the mortality from this disease, compared with what it was 10 or 20 years ago.

Examination of the table listed hereunder which shows the "Distribution of Cases and Deaths from Notifiable Infectious Diseases" reveals the well known fact that the East Dry River Sub-District is the most unhealthy Sub-District in the City of Port-of-Spain, and invariably furnishes the largest number of deaths from these diseases.

During the year under report 90 cases of infectious diseases were the occupants of premises in the East Dry River Sub-District, and the deaths of 34 residents of this sub-district were certified to one or other of these notifiable infectious diseases.

Chart D
Port of Spain
Infectious Diseases - Notifications and Deaths 1922-1952





Infectious Diseases—Notifications and Deaths—1942 to 1952

Infectious Diseases		Notific	DATIONS			DEA	rhs	
INFECTIOUS DISEASES	Average 1942-46		1951	1952	Average 1942-46	Average 1947–51	1951	1952
Diphtheria	23.8	21.6	28	20	3.4	1.8	1	1
Enteric Fever	39.8	38.4	32	32	10.2	5.0	5	8
Pulmonary Tuberculosis	180.8	170.2	143	147	150.0	83.0	27	28
Tuberculosis (Other forms)	12.2	7.4	3	3	10.0	9.6	7	12
Pneumonia (All forms)	179.4	71.0	81	68	107.6	64.6	80	72
Ophthalmia Neonatorum	12.6	5.0	8	10		_		_
Chicken Pox	82.8	71.2	95	94		_		
Encephalitis Lethargica	–		_	1	1.0	0.2		
Acute Ant. Poliomyelitis	5.4	1.6	_	3	1.0	0.4	_	
Puerperal Fever	14.6	1.2			2.2	1.0	1	_
Cerebro-Spinal Fever	1.2	1.2	2		1.0	0.2	_	_
TOTAL	552.6	388.8	392	378	286.4	165.8	121	121
Rate per 100,000 population	541	384	367	345	280	165	113	111

Distribution of Cases and Deaths from Notifiable Infectious Diseases, 1952

			TY OPER	ST.	CLAIR	East Dry River		BELMONT		Woodbrook		St. James	
DISEASES		Cases noti- fied	Deaths	Cases noti- fied	Deaths	Cases noti- fied	Deaths	Cases noti- fied	Deaths	Cases noti- fied	Deaths	Cases noti- fied	Deaths
Diphtheria		3				6		3	1	7		1	
Enteric Fever		6	1			10	1	8	1	3	2	5	3
Pulmonary Tuberculosis		44	7			38	12	28	4	13	3	24	2
Tuberculosis (Other forms	(1	4				3	1	4			1	1
Pneumonia (All forms)		10	18	1		20	18	29	12	2	2	6	22
Ophthalmia Neonatorum		2				3		3				2	
Chicken Pox		20		1		13		22		13		2 5	
Encephalitis Lethargica		1											
Acute Ant. Poliomyelitis		. 1		1								1	
Puerperal Fever													
Cerebro-Spinal Fever													
TOTAL		88	30	3	• 1	90	34	94	22	38	7	65	28
Rate per 100,000 populati in each Sub-district	on	234	80	164		371	140	502	117	274	50	506	218

Notifiable Infectious Diseases-Home and Hospital Deaths, 1952

		DEATHS		Hospital Deaths	Corresponding percentage for	
DISEASES	At Home	At Hospital	Total	Total Deaths	the year 1951	
Diphtheria Enteric Fever Pulmonary Tuberculosis Tuberculosis (Other forms) Pneumonia (All forms) Puerperal Fever Cerebro-Spinal Fever Acute Poliomyelitis Encephalitis Lethargica	1 16 2 39 —	1 7 12 10 33 —	1 8 28 12 72 — — —	100.00 87.50 42.86 83.33 45.83	100.00 18.52 85.71 47.50	
TOTAL	58	63	121	52.07	44.63	

TUBERCULOSIS

Pulmonary Tuberculosis

Of all the infectious diseases which are prevalent in the City of Port-of-Spain and which cause disease and death among its residents, tuberculosis and especially pulmonary tuberculosis occupies pride of place. It is at once the most common and, except during the last three years or so, the most deadly, occupying as it does fifth place among the causes of deaths in the Urban Sanitary District. In addition, because of the nature of the disease that it gives rise to and the peculiar stigma associated with it, pulmonary tuberculosis is responsible for no end of concern and anxiety to the Public Health Department; concern and anxiety, however, which are beginning now to show signs of diminishing in view of the fact that it would appear that the energy and time which have been dedicated recently to the detection and treatment of this disease in its earliest possible stage are beginning to bear fruit.

True it is that for a long time comparatively little was being done for the care and welfare of the sufferer from tuberculosis, and treatment of the disease itself was far from being adequate and it was not surprising, therefore, that a sense of hopelessness and frustration had taken complete hold of the poor unfortunate victim; but from the year 1946 when a Tuberculosis Division was established to the present day the public health forces of Government and Municipality as well as the progressive and purposeful efforts of that voluntary organisation, the Association for the prevention of Tuberculosis, have concentrated on the ravages wrought by this disease and particularly on the fact that the disease is curable, if detected early enough; and today the dark clouds are lifting and the outlook for the tuberculosis patient is very much brighter than it was a decade ago.

A person who is nowadays unfortunate enough as to be affected with tuberculosis can count on the best possible medical skill and attention, on the most recent and up-to-date measures for his treatment, on a reasonable amount of after-care and welfare, and on a fairly good chance of his being rehabilitated as a useful citizen able to earn, if not the whole, but a large percentage of his living, and on his being able to live the life of a normal person once again.

That does not mean to say that all is well and that there is very little more to be done. Far from it. There is much leeway yet to be made up.

The number of cases that can be hospitalised is still strictly limited by the number of beds available; there are still numbers of cases in an infectious state who remain a danger to their families, to their neighbours, and to others, who cannot be properly isolated and for whom care and welfare are far from being adequate; and for the basic underlying predisposing causes of this disease, i.e., bad housing, congestion and overcrowding, insanitary surroundings and poor and inadequate food, very little has been done and is, in fact, actually being done.

The money that is being spent in providing a measure of after care and welfare and some degree of rehabiliattion for these patients is strictly limited by the funds that have been made available for the purpose and this, to say the least, falls far short of what the situation, even as it exists at the moment, demands.

With the general awakening of consciousness as to the ravages of this disease and its great danger to the community, it is sincerely to be hoped that the necessary funds for carrying out the various projects that have been formulated will soon be forthcoming.

During the year under report 147 cases of pulmonary tuberculosis were notified and 28 deaths certified, giving a death rate of 26 per 100,000.

Since the year 1949 the number of deaths certified to pulmonary tuberculosis has been unde the 100 mark and during the past two years has actually fallen to below 50 per year. This is a marked contrast to what obtained in previous years when the number of deaths ranged from 170 to 108 per year.

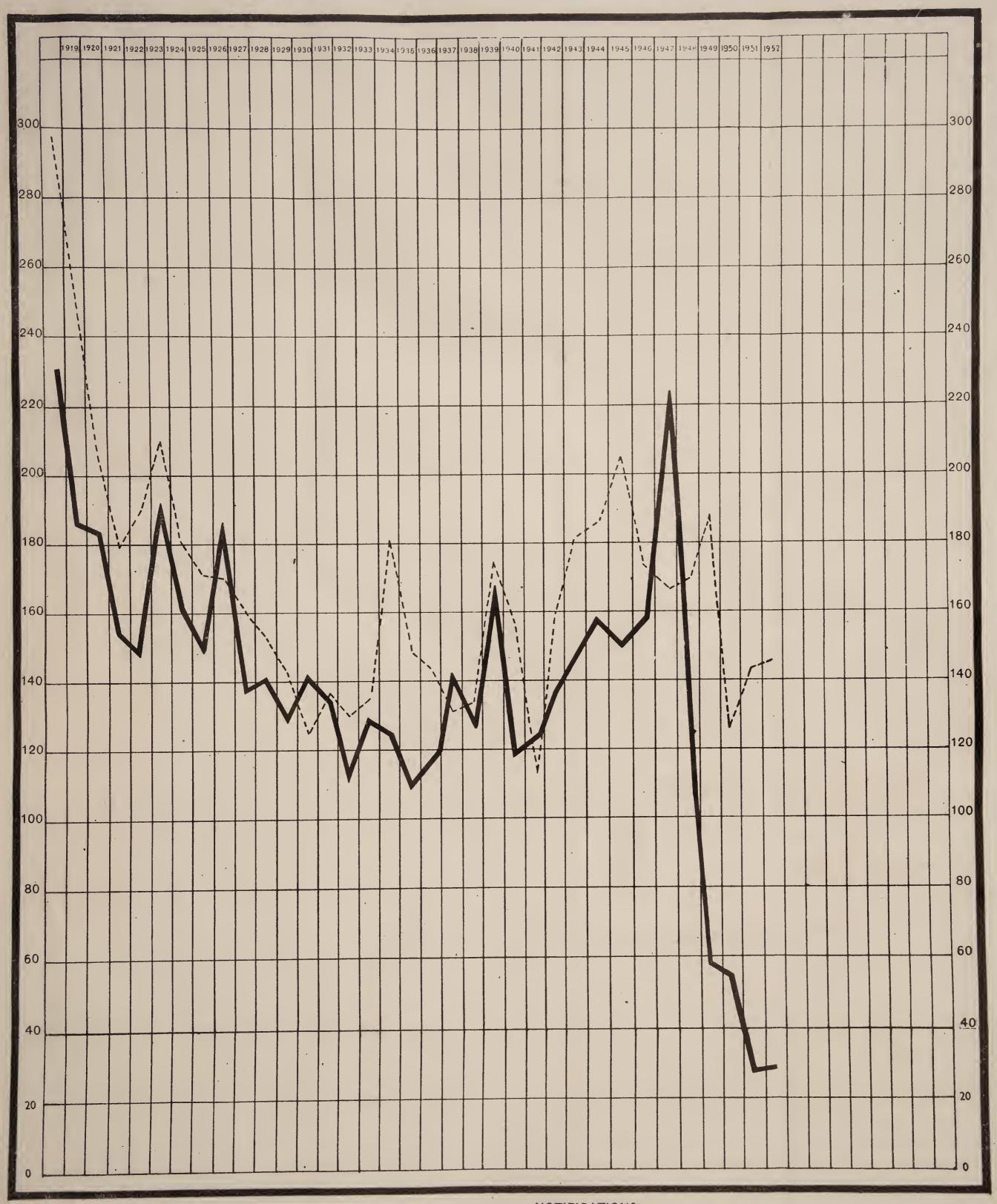
In fact in the year 1918, the first year after the establishment of the Local Authority in which it was possible for full and accurate data to be collected, 299 notifications were received and 233 deaths certified to pulmonary tuberculosis.

Pulmonary Tuberculosis-Notifications and Deaths, 1918-52

Per	riod			Notifications	Deaths	Death Rate per 100,000 population
Year 1918				299	233	343
Yearly Averages:			- 1	207	173.2	265
1919–23	•••	•••	•••			$\frac{203}{238}$
1924–28	• • •	•••	•••	167.6	154.6	185
1929-33	•••	•••	•••	133.6	129	
1934–38	•••	•••		147.4	124.6	162
Average 1919–38		•••		163.9	145.4	213
Year 1939				175	167	185
1940	•••			155	118	128
1941	•••			113	124	127
1942				157	136	137
1943	£			182	148	145
1944)	186	158	152
1945	•••	•••		206	150	141
1946	•••	•••		173	158	157
1947	•••	•••	•••	$\frac{173}{222}$	167	174
1948	•••	•••		170	108	109
1948 1949	•••	•••	•••	189	58	57
	•••	•••	••••		55	53
1950	•••	•••	•••	127		$\frac{55}{25}$
$\begin{array}{c} 1951 \\ 1952 \end{array}$	•••	•••	***	$\begin{array}{c} 143 \\ 147 \end{array}$	$\begin{array}{c} 27 \\ 28 \end{array}$	$\frac{25}{26}$

Chart E
Port of Spain

Pulmonary Tuberculosis — Notifications and Deaths 1918-1952



---- NOTIFICATIONS

DEATHS



Non-Pulmonary Tuberculosis

This is a form of Tuberculosis which deserves more attention than it usually gets for the simple reason that it is the form of tuberculosis that is more amenable to preventive measures than any other form.

It, however, suffers from the handicap that it is a form of tuberculosis that is more often diagnosed in the post-mortem room than in the clinic because of the somewhat obscure nature of the disease and the similarity of its elinical manifestations with other well known clinical conditions.

In fact tuberculosis of the bowels, the glands, the bones and the meninges are usually caused by the bovine type of the tubercle bacillus which is conveyed by the food of man, especially the milk and meat of bovines.

Regular ante-mortem examination of animals about to be slaughtered, efficient post-mortem inspection and the proper pasteurisation of milk, before meat and milk are offered for sale to the general public would go a long way towards eliminating the basic cause of this disease.

It is a matter of some importance to bear in mind the fact that the percentage of positive reactions to the tuberculin test for tuberculosis would appear to be rising and it is stated that nowadays even goats are beginning to react positively, a fact that points to the need for more careful examination of, and for a wider application of the tuberculin test to, all cattle before they are added to non-reacting herds.

Non-Pulmonary Tuberculosis-Forms, Notifications and Deaths, 1952

	Forms			Notifications	Deaths
Miliary Tuber Tuberculosis o Do. Do.	culosis of Meninges Spine and Bones Mesentery	 	 	 1 2 —	3 5 3 1
	Total	 	•••	 3	12

Deaths from Non-Pulmonary Tuberculosis, 1924-52

		Perio	od				Deaths	Rate per 100,000 population
Yearly Averages	3 :							
1924-28				•••	•••		15	23
1929-33					•••		15.2	22
1934-38	•••	•••	•••	•••	•••	•••	10	13
Average 19	24-38				•••		13.4	19
Year 1939		•••					15	17
1940	•••			•••	•••	•••	14	15
1941					•••	• • •	6	6
1942			•••		•••		4	4
1943			•••	•••	•••	•••	9	9
1944			•••	•••	•••	•••	10	10
1945					•••	•••	13	12
1946		•••		•••	• • •	•••}	14	14
1947			•••	•••	•••	•••	11	11
1948			•••	•••	•••	•••	6	6
1949			•••	•••	• • •	•••	10	10
1950		•••	• • •	•••	•••	•••	14	13
1951			•••	•••	•••	•••	7	7
1952			•••	•••	•••	•••	12	11

ENTERIC FEVER

Among the very first questions asked by the intelligent visitor to any community concern the prevalence of enteric fever, the number of cases occurring and whether the disease is water-borne or food-borne and this because, apart altogether from the serious nature of the disease itself and the possibility of its leading to the death and serious disability of the individual, the prevalence of typhoid fever in any community is a very sensitive index of the state of health and sanitation prevailing, of the purity of the water supply, of the relative cleanliness of the food supply, in fact of the general level of health education obtaining in that community.

Where the system of disposal of excreta is such that it is possible for the infected excrement of man to contaminate the food or water supply, and so once again infect the intestines of another human being, there one will always find that the morbidity and mortality from bowel-filth diseases is high.

In the City of Port-of-Spain the incidence of typhoid fever has been showing a steady continous fall since the year 1924 when the sources of water supply were first subjected to chlorination, but with the rapid initial drop from round about 300 cases to well below 100 cases, the decline since then has been comparatively slow due undoubtedly to the fact that this residual typhoid is due to infected and contaminated food, the cleaning up of which is a slow uphill process taking the time and the continous effort of a health education campaign as to the measures to be adopted to secure good, clean, and wholesome food. Hence latterly the results have not been spectacular and it is only within the last five years that the number of cases has fallen to well below the fifty mark.

As to the food education campaign itself it continues to exert its beneficent influence, and as the appreciation of the means and ways whereby food can be protected from contamination with filth, dirt, dust and vermin becomes more universal, it is expected that the number of cases will still further diminish to the point where typhoid fever and the bowel-filth diseases will cease to be a public health problem within the Urban Sanitary District.

During the year 1952, 32 cases of typhoid fever with 8 deaths were recorded at the Public Health Department. This represents the same number of notifications as, but three deaths more than, in the previous year 1951.

Why the death rate from this disease still remains so high is a matter for concern, and can only point to neglect in the early detection and treatment of these cases, seeing that so much better results are being obtained by the treatment of this disease with some of the newer antibiotics.

In the meantime the routine measures of prevention which include disinfection of premises and fomites, the inoculation of contacts, and the oiling of cesspits in and around the premises where cases occur, continued unabated during the year under report.

ENTERIC FEVER
Notifications and Deaths, 1918-52

Perio	od			Notifications	Deaths	Death Rate per 100,000 population
Year 1918				495	104	152
Yearly Averages:						
1919-23	•••	•••		301.8	67.8	103
1924–28	•••	•••	•••	162.4	25.2	39
1929-33	•••	•••	• • •	37	10.8	16
1934-38	•••	•••	•••	59.8	14.6	19
Average 1919-38	į			140.3	29.6	44
Year 1939				75	15	17
1940				70	11	12
1941				56	14	14
1942				37	12	12
1943				* 38	12	12
1944				32	9	9
1945				55	10	9
1946				37	8	8
1947				. 68	7	7
1948				42	5	5
1949				36	5	5
1950				14	3	3
1951	,			32	5	5 7
1952				32	8	7

Inoculation of Enteric Fever Contacts, 1952

T.A.B. Injections

Year					Number Receiving one Injection	Number Receiving two Injections	Total
1947	•••				250	222	472
1948					85	61	146
1949			•••		101	44	145
1950					64	32	96
1951	•••		•••		329	249	578
1952					66	26	92

PNEUMONIA

Pneumonia is an infectious disease that occurs with great frequency in the City of Port-of-Spain and which is of serious import in so far as morbidity and mortality are concerned, because it can give rise and does give rise to a variety of after-effects of which pulmonary tuberculosis, heart disease, lung abscess, empyema, brain abscess and anaemia are the commonest, and because it is not an infrequent cause of death especially when it occurs, as it is wont to do, as the terminal complication of some general systemic disease which has caused the patient to be bedridden for some time.

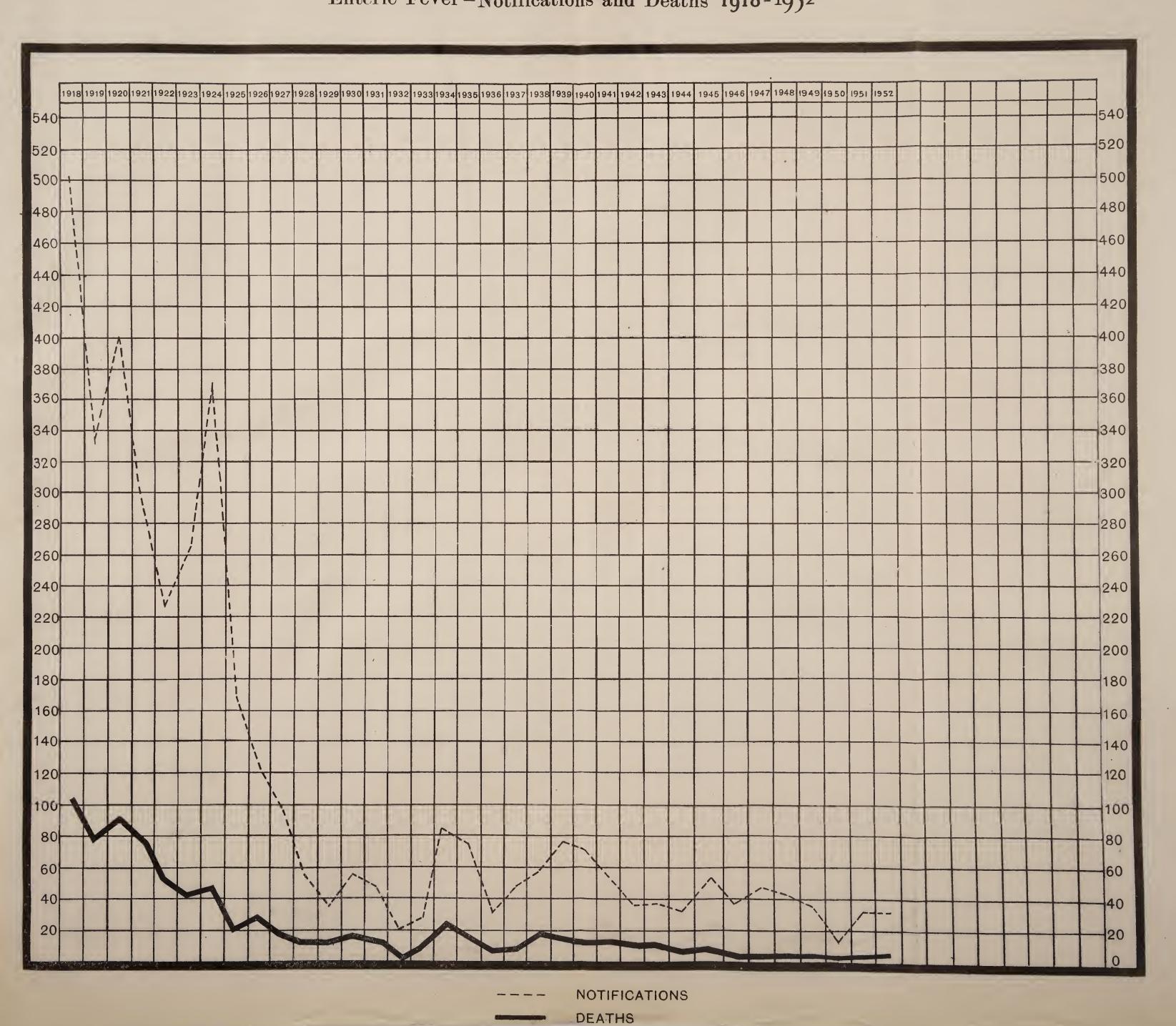
It is not a disease, however, that strikes such terror in the heart of the patient or his relatives, as pulmonary tuberculosis does, and this is because the course of the disease has been so altered since the introduction of the sulpha drugs, penicillin, and other antibiotics that a patient suffering from either broncho or lobar pneumonia stands a much improved chance of complete recovery in a short space of time, unless the disease occurs as the final terminal event in a long drawn out illness due to some general systemic disease.

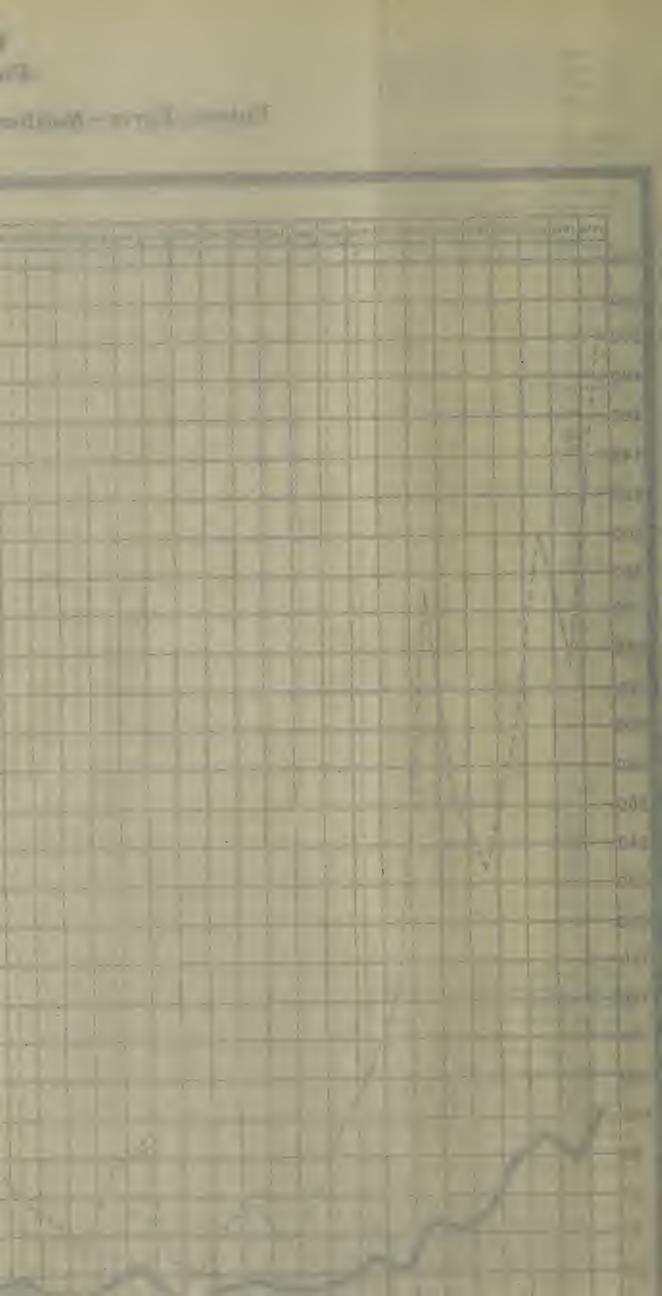
Before the days of the newer drugs the mortality from pneumonia was somewhere in the vicinity of 30-40 per cent; today the mortality is near 5 to 10 per cent.

It must, however, be remembered that the disease has undergone a change of character within recent times and cases of classical lobar pneumonia with high temperatures persisting for 7, 9 or 11 days and falling by crisis are comparatively rare, the prevailing type being the asthenic influenza like variety with a lower degree of fever and patches of consolidation that are scattered and irregular. These cases have now been designated virus pneumonia, and respond less to sulpha and penicillin but more to the newer antibiotics like aureomycin, &c., &c.

Chart F
Port of Spain

Enteric Fever-Notifications and Deaths 1918-1952





Practitioners have to be reminded constantly that pneumonia (both forms) is a notifiable infectious disease and that it is their legal duty to notify these cases to Public Health Departments in order to enable public health officers to adopt the necessary public health measures, which are admittedly not very many, and which consist mainly of current disinfection, terminal fumigation, and where possible and desirable, isolation.

It is largely because practitioners are not fully convinced of the efficacy of preventive measures in these cases that the disease is so inadequately notified, and when it is possible to treat effectively and quickly a case at home and so prevent the spread of the disease, it is always a difficult matter to persuade practitioners to notify the case and readily agree to its removal to Hospital.

This, however, is of some importance in the congested and overcrowded areas of our eastern and northern suburbs where the residents are poor, houses dirty, ill kept and dilapidated, and sanitation unsatisfactory and sometimes even lacking altogether.

Under these circumstances the disease may spread but, much worse, complications invariably set in and the case of pneumonia becomes one of pulmonary tuberculosis, or of heart disease with consequent greater deterioration of health and a long drawn out, even if curable, illness.

Removal of such a case to Hospital may make all the difference between death or survival, between complete recovery, or a complicated and drawn out convalescence.

During the year under review 68 cases of pneumonia (all forms) were notified and 72 deaths recorded, a fact which demonstrates clearly that pneumonia is a "badly notified" disease.

This, however, may be stated with accuracy about the deaths certified to this disease, that very often the terminal complication of hypostatic pneumonia is stated as the cause of death on the death certificate, the underlying general disease that the patient had suffered from, perhaps for years, being forgotten or omitted altogether.

PNEUMONIA—(All Forms)

Notifications and Deaths, 1922-52

]	Period			Notifications	Deaths	Death Rate per 100,000 population
Yearly Averages: 1922-26				111.8	78	123
1927-31	•••	•••		69.8	53.4	79
1932-36		•••		155.4	80.6	110
Average 1922-36	•••	•••		112.3	70.7	104
				1		
Year 1937		•••	• • •	125	85	110
1938	•••			101	70	83
1939		•••		107	59	65
1940				69	63	68
1941	•••	•••		138	88	90
Average 1937-41	•••			108	73	83
Y ear 1942				332	152	153
1943				251	149	146
1944				109	97	93
1945		•••		118	79	74
1946		•••		87	61	61
1947				75	64	67
1948		•••		62	51	52
1949		•••		73	74	73
1950		•••		64	54	52
1951		•••		81	80	75
1952		•••)	68	72	66

DIPHTHERIA

As I have stated before in previous annual reports Diphtheria is an infectious disease that is becoming a source of anxiety to public health workers all over the Colony.

More and more cases are making their appearance in the Urban Sanitary District and though the disease remains predominantly of the mild type, yet cases are apt to be missed because the diagnosis is not always borne in mind in any and every case of throat trouble, and deaths are apt to occur from involvement of the larynx.

In fact it is becoming increasingly clear that a campaign of active immunisation will sooner or later have to be undertaken in the schools and clinics, as already the more health conscious and more intelligent sections of the population are beginning to ask for protection against the ravages of the disease, and passive and preferably active immunisation are now being undertaken with increasing frequency by the Public Health Department.

It is now the rule to immunize actively all contacts of cases of diphtheria, children as well as adults, two injections of A.P.T. being given to children and three injections of T.A.F. to adults, and so far no untoward reactions of any kind have been encountered.

It must be remembered by those who have to deal with this disease that passive immunisation with diphtheria antitoxin tends to cause the development of anaphylactic reactions later on, if and when serum has to be administered, that it may serve to mask the development of frank clinical cases making them more dangerous as carriers of the disease, and that in any case it confers a passive immunity that is of short duration only.

During the year under report 20 cases of diphtheria were notified and one death recorded.

This compares very favourably with the year 1937 when 61 cases with 2 deaths were notified

DIPHTHERIA

Notifications and Deaths, 1917-52

		Perio	od			Notifications	Deaths	Death Rate per 100,000 population
Yearly	y Averag					11.8	1.4	9
	$917-21 \ 922-26$	•••	•••	•••		14.8	2	2 3 2 3
	927-20 $927-31$	•••	•••	•••		23.8	$1.\overline{6}$	2
	932 - 36	•••	•••	•••	[29.8	2.2	. 3
1.	002-00	•••	•••	•••		20.0		
A	verage	1917-36		•••		20	1.8	3
Year	1937	•••		•••		30	4	5
	1938	•••	•••			16	3	4
	1939	•••		•••	•••	61	2	$egin{pmatrix} 2 \ 2 \ 2 \ 2 \ \end{pmatrix}$
	1940	•••	•••	•••	• • • •	37	$egin{pmatrix} ar{2} \ 2 \ \end{matrix}$	2
	1941	•••	•••	•••	• • • •	30	2	2
	Averag	e 1937–41				34.8	2.6	3
Year	1942					18	3	3
	1943	•••				40	4	4
	1944					19	3	3
	1945		•••	•••		20	5	5
	1946	•••	• • •	•••		22	2	$\frac{2}{2}$
	1947		•••	•••		23	2	2
	1948	•••	•••	•••	•••	9	1	1
	1949	•••	•••	•••	•••	11	2	2
	1950	•••	• • • •	•••	•••	37	3	3
	1951	•••	•••	•••	•••	28	1	1
	1952	•••	•••	•••	•••(20	1	1

CHICKEN POX

This is not a disease that causes much worry and concern to Public Health Departments seeing that cases are usually mild and easy of diagnosis and one often wonders why chicken pox has been made a notifiable infectious disease at all.

The answer is, of course, that chicken pox is not unlike small pox in the eyes of the layman, and to the practitioner the occasional severe case of chicken pox may give rise to great difficulty in diagnosis from mild small pox; in fact it is not uncommon for the inexperienced practitioner to call chicken pox, small pox, and so cause no end of bother and anxiety to relatives, friends, and public health officials alike.

It is, however, much better, from a public health point of view, that chicken pox should be mistaken for small pox, than small pox to be mistaken for chicken pox, until it is too late and a considerable amount of damage already done.

Chicken pox is very infectious and under conditions of overcrowding and congestion runs like wild fire through the inmates of a dwelling especially where sanitation is poor and nutrition inadequate.

During the year 1952, 94 cases of chicken pox were notified to the Department as compared with 95 in the year before.

This may be regarded as in the nature of a small epidemic, such as occurred in the year 1951 and also in 1950.

The largest number of cases that was ever recorded in the annals of the history of the Public Health Department was in the year 1946 when 196 cases were notified with as usual not a single death.

Chicken Pox-Notifications, 1924-52

	Period		Notifications		Period	Notifications
Yearly Average 1924–28 1929–33 1934–38 1939–43	s: 	:::	 19.8 41 110.4 42.6	Year	1944 1945 1946 1947 1948 1949 1950 1951	33 122 196 57 51 57 96 95 94

OTHER NOTIFIABLE INFECTIOUS DISEASES

No notification of Encephalitis Lethargica, of Cerebro-spinal Fever or of Paralytic Rabies was received at the Public Health Department during 1952.

No case of Plague, Cholera, Typhus, Yellow Fever, or of Small Pox, either Variola Major or Variola Minor (Alastrim) was reported to the Public Health Department during the year under report.

Three (3) cases of Acute Anterior Poliomyelitis were reported to the Department during the year under review.

ACUTE ANTERIOR POLIOMYELITIS

This is an infectious disease that is very alarming in its manifestations and causes great anxiety and concern to relatives and friends because of its crippling effects. It is fortunately not very common in this Colony but every now and then a small outbreak occurs, as in 1942 when 26 cases occurred within the limits of the City with 3 deaths. In the period 1941–1942 the disease was epidemic in the Colony and a total of 194 cases were reported.

ACUTE ANTERIOR POLIOMYELITIS

Notifications and Deaths, 1927-52

Year	No. of cases reported	Deaths	Year	No. of cases reported	Deaths	Year	No. of cases reported	Deaths
1927–29 1930 1931 1932 1933–35	5		1936 1937 1938 1939 1940	 3 10 2 1	- 1 - -	1941 1942 1943-44 1945 1946 1947 1948 1949 1950 1951	15 26 — 1 — 3 4 —	4 3 -1 1 2

NON-NOTIFIABLE INFECTIOUS DISEASES

Under this heading are included diseases which are quite definitely of an infectious nature, some highly so and others to a very much less extent and only after intimate contact has taken place over a number of years.

In fact there is no hard and fast rule which determines whether or not a disease should be classified as notifiable infectious or non-notifiable infectious except the purely arbitrary rule that it has been so declared by proclamation of the Governor in accordance with Section 103 of the Public Health Ordinance, Ch. 12. No. 4.

In fact it is possible for any of the diseases listed as "non-notifiable" to be declared "notifiable" depending upon the relative prevalence of the disease in the Urban Sanitary District, and the urgent need that exists for the preventive measures of isolation, disinfection, and inoculation to be instituted.

Thus it comes about that measles is sometimes made notifiable and whooping cough occasionally so.

Notification of these diseases gives the public health officer an opportunity of discovering how prevalent the disease is, where it is occurring in its largest numbers, and how necessary specific preventive measures are.

The more chronic of the diseases listed under this heading pose public health problems of major importance, and the whole civilised world is nowadays greatly concerned at the damage they inflict and the toll of life that they exact, apart altogether from the fact that the morbidity they induce can be greatly disabling, and may be a source of great cost to the community by reason of the length of time that is taken to cure it, if and when cure is possible, and the inevitable loss of man-hours that it entails.

I refer to diseases like malaria, syphilis, hookworm and leprosy.

In fact the conscience of all civilised communities has become so disturbed that nearly every country is actively engaged in executing programmes of treatment and prevention under the aegis of the World Health Organisation.

Only death returns are available to determine the relative prevalence of these diseases, but even these can be greatly misleading seeing that many deaths attributed to other well known and common causes are in deed and in fact caused by one or other of these diseases, the complication of the disease being listed as the cause of death; such, for instance, is a death attributed to cerebral thrombosis, coronary thrombosis, aneurysm, paraplegia, arterio sclerosis or even a ortic regurgitation which are all quite often caused by syphilis, this being the basic, underlying condition that gave rise to the immediate cause of death.

Again liver abscess may be the only clinical manifestation of amoebic dysentery, anaemia may be due to ankylostomiasis, and myocardial degeneration due to influenza.

Obviously if we wish to get accurate information as to how many of these cases are occurring in the Urban Sanitary District, death returns cannot be entirely relied upon and it would appear that the only proper course is to make them all notifiable.

Non-Notifiable Infectious Diseases—Home and Hospitals Deaths, 1952

Ът	SEASES				DEATHS		Hospital Deaths	Corresponding
				At Home	At Hospital	Total	per cent. of Total Deaths	percentage for the year 1951
Malaria Whooping (Cough				•			_
Influenza Dysentery Ankylostom			,	2	i	· 3	33,33	
Syphilis .		•••	:::	i ·	4	5	80.00	· 45.45
To	TAL			3	5	8	62.50	29.41

MALARIA

I have often referred in previous reports to the fact that malaria cannot be considered a problem of public health importance within the limits of the City.

This is an undisputed fact and every survey undertaken with a view to detecting the possibility of acquiring malaria within the limits of the City—and there have been two such within the last 18 years—has proved beyond the shadow of a doubt that anophelene breeding is infinitesimal, only a few larvae and an occasional adult mosquito being met with, and that only in the extreme eastern, northern, and western areas where these boundaries are in contact with areas that were once highly malarious.

The writer has been successful in finding anophelene larvae in pools on the Eastern Dump, in the swampy area which now exists at the back of the Abattoir and Sea Lots, the result of reclamation which has been taking place at this point and which has resulted in the production of pools of brackish water where mosquito breeding has to be kept down by continuous oiling; in the swampy Mucurapo Lands opposite the Woodbrook Cemetery at the south-western limits of the City; and in that part of the St. James Area which adjoins the Cocorite Swamp, a fact that is not at all surprising in view of the once heavy incidence of malaria in the areas outside the City that are immediately contiguous.

This position cannot but be considered satisfactory and is undoubtedly the result of the long continued and persistent efforts of the Public Health Department directed towards the elimination of possible breeding places and the oiling, canalising and clearing of those other breeding places that cannot very well be eliminated.

Year in, year out, the work of filling depressed places capable of holding water, the oiling of pools, the trimming of the edges of the Maraval River, the canalising of its bed and the oiling of stagnant pools continue with the result that very few potential breeding places are left unattended to and very little breeding does actually take place.

Once again I deem it my duty to record that the Malaria Division of the Health Department of Government have been sparing no effort to tackle the problem of malaria in the Colony in general, and in those areas immediately adjoining the City in particular, and their efforts have borne and are continuing to bear rich fruit in that the incidence and mortality from malaria have shown a substantial decline in all areas.

The Cocorite Area, at one time a highly malarious area, is now almost completely free of anophelene mosquitoes, the direct result of those temporary works of drainage, oiling and canalising of pools of stagnant water which has been carried out and are being carried out here by the Malaria Division of Government.

Once again the Local Sanitary Authority desires to record its gratitude to the Malaria Division of the Health Department of Government for the close co-operation and ready assistance given in all the various mosquito problems that affect the City.

SYPHILIS

Syphilis makes such widespread and damaging incursions on all tissues of the human body that its importance as a public health problem of the first order cannot be overestimated and whilst it is true that it is only ten years ago that a proper central organisation with adequate up-to-date equipment and trained personnel has been set up—and I refer to the Caribbean Medical Centre established by the Health Department of Government and Colonial Development and Welfare with the active organising assistance of Colonel Wenger of the American Army—the results which have been achieved in the way of detection and treatment of venereal disease, in the awakening of the public conscience to the damages and ravages of these diseases, in the re-education and sometimes the rehabilitation of the known members of the "prostitute" class, who are largely responsible for the ready spread of the disease, are indeed gratifying.

In so far as the City of Port-of-Spain is concerned this Division of the Health Department of Government has been of inestimable value and once more the Local Authority desires to record its gratitude for the solid achievement of the Division and the great benefit to the public health of the City that it has proved itself to be.

There is nowadays a growing consciousness on the part of the citizens of the Urban Sanitary District of the importance of syphilis as a menace to the health of the community in view of the widespread damage to the physical system that it can cause, of the deleterious influence it can exert on mothers and children, of the important part it plays in the infant mortality particularly that part of it which occurs during the first month of extra-uterine life, viz. the neo-natal mortality, of the moral degradation that leads up to the disease, and of the domestic unhappiness and disruption that it can give rise to.

It is an uncommon experience to encounter in the course of the daily routine a case of primary chancre and when one does occasionally whilst examining labourers or food handlers, there is no difficulty in persuading such sufferers to go to the Caribbean Medical Centre and get advice and treatment, and these people are known to persevere with their treatment until they have been pronounced cured.

This is a marked contrast to what obtained 10 years ago when it was extremely difficult to get such cases to continue with their treatment especially after the primary chancre had got healed.

The tissues of the central nervous system, of the heart and blood vessels, of the liver and kidneys, are nowadays the chief seat of the clinical manifestations of syphilis, and this is undoubtedly due to the fact that the inadequate and inconclusive treatment of former days is now beginning to make its influence felt in the form of this attack on these very delicate and vulnerable tissues.

In the year under report the returns show that six deaths were certified to syphilis, the lowest number ever recorded in the annals of the history of the Local Authority, giving a death rate of 5 per 100,000 population.

It is, of course, a well recognised fact that the returns that list syphilis as a cause of death represent only a proportion, perhaps only a minor proportion, of the deaths that are attributable to this disease due largely to failure on the part of the practitioner to fill up adequately the death certificate. A death ascribed to cerebral thrombosis, hemiplegia, meningitis, aneurysm, arterio-sclerosis, coronary thrombosis, aortic regurgitation, &c., is often a death that should be certified to syphilis because the disease is the underlying general disease that has caused the complication which has given rise to the terminal event.

Deaths	from	Syphilis-1918-52	,
Deaths	TT OTT	Oypining-Lyro-Da	,

		Perio	od			Deaths	Rate per 100,000 population
Yearly Average	es :						
1918-22					 	16.2	24
1923-27					 	56.8	88
1928-32	•••	•••			 	28.2	41
1933-37			•••	•••	 	21.8	29
Average 1	918-37				 	24.6	37
Yearly Averag	e 1938–42				 	24.6	27
1943					 	29	28
1944					 	36	35
1945					 	22	21
1946					 	20	20
1947					 	21	22
1948					 	8	8
1949					 	7	7
1950					 	8	8
1951					 	11	10
1952	•••				 	6	5

DYSENTERY, DIARRHOEA AND ENTERITIS

Much more precise and accurate information is usually necessary, information that could be obtained by trained sanitary inspectors and health visitors if these cases were made notifiable, before it is usually possible to place the numerous cases of so-called dysentery and diarrhoea and enteritis in their correct categories, for as they are usually certified on death certificates they constitue a mixed bag exhibiting the common feature of looseness of the bowels with the passage in some cases of blood and mucus.

They are usually classified as "bowel filth" diseases and in a sense this is a useful term indicating as it does that the cause of this group of diseases is infected faecal matter which contaminates food-stuffs, particularly those that are consumed raw or partially cooked, like green vegetables, water cress, lettuce, cabbage, various fruits, milk, ice cream, ices, made-up dishes, &c., and so reach the alimentary track where the germs multiply and reproduce the disease.

There can be no doubt, however, that many and varied diseases are often included under this heading. Some of these are cases of true dysentery, others are cases of tuberculosis, of cancer, of cirrhosis of the liver, &c., and others again are cases of food poisoning, and corresponding with this varied aetiology is the fact that the age incidence also varies considerably, many cases occurring in infants and a fair number in the aged.

In fact the Diarrhoea and Enteritis of infants and young children represents a special disease which is almost exclusively conveyed by contaminated milk and which is almost certainly due to the toxins produced by the activities of the food poisoning organisms.

Again these diseases are usually associated with dirt, squalor, the inadequate disposal of excreta, overcrowding and poor nutrition, and the figures listed in the table below show that it can be confidently predicted that the East Dry River District furnished, as it has always done, the largest number of cases in the year under report.

In view of the varied aetiology, and of the fact that often the knowledge of the existence of these cases only reaches the public health official after death has taken place, preventive measures are not always easy of application but there can be no doubt whatsoever that intensive measures to secure good clean and wholesome food free from contamination by dirt, dust, flies and vermin must remain the sheet anchor of all action directed towards a reduction in the number of deaths attributable to these diseases.

Deaths from the Dysenteries—1918-52

		Peri	od				Deaths	Death Rates per 100,000 population
Year 1918	•••						43	63
Yearly Averag	ges:							
1919–23	•••	•••	•••	•••	•••	•••	38.2	58
1924-28	•••	•••	•••				32	49
1929-33	•••			•••			14.8	21
1934-38		•••	•••			• • • •	5.4	7
1939-43	•••	•••					7.4	8
1944-48		•••		•••			3	3
Average 1919-	-48		•••		•••	•••	16.8	23
Year:								
1949	•••	•••	•••	•••	•••	•••	1	1
1950	•••		•••	•••			2	2
1951	•••						1	1
1952							3	3

Deaths from Diarrhoea and Enteritis-1918-52

		Perio	od				Deaths	Death Rates per 100,000 population
Year 1918				•••			193	284
Yearly Averag	es:							
1919–23	•••	•••	•••	•••	•••	•••	143.6	218
1924-28	•••			•••	•••		72.8	112
1929–33	•••						52.8	76
1934-38	•••			•••			40	52
1939-43	•••	•••		•••			78.4	81
1944-48	•••	•••	•••	•••	•••		46	44
Average 1918-	48	•••	•••	•••			76.16	103
Year:								
1949	•••	•••	•••	•••	•••	•••	30	30
1950		•••		•••	•••		37	35
1951		•••					42	39
1952					***		39	36

Diarrhoea and Enteritis-Deaths in Sub-districts

		Su'	b-distri	cts		<u> </u>		Deaths
City Proper	f		•••	•••	•••			 7
St. Clair			•••		•••			 1
East Dry River	•••		•••		•••			 18
Belmont	•••	•••	•••			•••		 8
Woodbrook	•••		•••		•••	•••	•••	 3
St. James	•••				•••	•••	•••	 2
		Total			•••			 39

OTHER PRINCIPAL CAUSES OF DEATH

Cardiac and Vascular Diseases

These diseases continue to take heavy toll of human life in the Urban Sanitary District and though they claimed fewer deaths during the year under report than in the year before, 247 as against 315, they still occupied pride of place in the list of cause groups that gave rise to mortality.

The main underlying causes of these diseases are, as I have stated before, the stresses and strains incidental to the complexity of modern life, but a certain percentage of these cases is due to organic disease that is preventable, such as those which are due to syphilis and to diseases of the kidney and liver.

Adequate and efficient treatment of syphilis in the early stages would spare these delicate tissues of the heart and blood vessels which are so vulnerable to the disease and for which so very little in the way of treatment can be done when once attacked.

It is a matter of prime importance for those who are afflicted with these diseases to learn to live within the limits of one's heart, which will help to make life tolerable and allow useful work to be done.

All this can be achieved by health education and a campaign directed to this end would, I have no doubt, be of great assistance in checking the ravages of these diseases that often exact the greatest toll at that period of life when the victim can, by reason of his knowledge, wisdom and experience, be of the greatest assistance to the community.

Deaths from Cardiac and Vascular Diseases in Age Groups—1952

	Forms	8			$^{0-20}$ years	21–40 years	41-60 years	Over 60 years	Total
Diseases of Arteries and Ve	alves :								
Aneurism		•••			_	3	9	6	18
Arterio-Sclerosis and	Atheron	ma			-	_	h	4	4
Coronary Thrombosis			•••		_	1	8	8	17
Mitral and Aortic Inc	ompete	nce				1	1	1	3
Other Diseases of Art	eries aı	nd Valves	•••	•••		3	18	16	37
Diseases of the Heart : Auricular Fibrillation					_	_	1	_	. 1
Pericarditis	• • •	•••	• • •		-	_	1		1
Myocarditis	•••	•••	•••	•••	-	2	6	22	30
Myocardial Degenerat	tion	•••			_	-	4	57	61
Angina Pectoris			• • •		_	_	_	1	1
Endocarditis	•••	•••			_	-	-	1	1
Other Cardiac Disease	es	•••	•••		5	5	18	40	68
Total				ſ	5	15	66	156	242

Cancer and other Malignant Diseases

Like the deaths due to cardiac and vascular diseases which have just been referred to, deaths from cancer and other malignant diseases claimed fewer victims in the year under report, 1952, than in the previous two years, though it is difficult to look upon this decline as significant from a statistical point of view.

The causes of these diseases continue to remain obscure in spite of much research.

Early diagnosis and treatment are the only means whereby the disease can be brought under control.

Any suspicious lump or indolent ulcer in any part of the body should at once be brought under the care of a doctor with a view to early diagnosis and, if necessary, appropriate treatment either by surgery, X-ray or radium.

Cancer and other Malignant Diseases-Forms, Sites and Deaths-1952

							DEATHS			
	Form	s and S	ites				Males	Females		
arcinoma: Left Antrum, Brond	ehi		•••				1	1		
Soft palate, pharyn bowel, colon, re	x, tongue,	oësoph 	agus, sto	omach, liv 	er, pancr	cas,	27	28		
Breast, vulva, ovar	y, uterus,			•••		•••	- /	29		
Hip		•••	•••		•••		_	1		
Site not stated			•••	•••	•••	•••	_	1		
ndefined Malignant No Ovary				•••	•••		_	1		
Ton	···	•••			•••		28	61		

Deaths from Cancer and other Malignant Diseases-1918-52

		Pe	riod				Deaths	Rate per 100,000 population
Yearly Avera	ges:				٠.	• !		
1918-22	•••				•••		44.4	67 .
1923-27							45.6	71
1928-32							44.6	65
1933-37	•••	•••	•••	•••	•••		556.8	76
Average	1918–37		•••		•••		47.9	70
Yearly Avera	ge 1938-4	<u> 1</u> 2	•••				75.4	82
1943	•••						88	86
1944							84	81 '
.1945	•••		•••	•••			80	75
1946		•••	•••	••• ~			79	78 78
1947		•••	•••	•••	•••		75	78
1948		•••		•••	•••		87	88
1949					•••		91	90
1950					···		93	89 .
1951	•••	•••	•••	•••	•••		101	94
1952	•••	•••	•••		•••		- 89	90

SANITARY ADMINISTRATION

Staff

At the end of the year under report there was a total of 182 employees attached to the Public Health Department, of which 46 were on the pensionable staff and 136 on the non-pensionable staff.

The Sanitary Inspectors on the permanent staff who numbered 20 since 1920, were 31 in number, an addition of 11 but of the latter only 10 were permanent men, the eleventh vacancy being then filled by a retired Sanitary Inspector, who was recalled to duty, there being at the time no suitable and qualified Sanitary Inspector to fill the vacancy.

Three vacancies for Health Visitors still remained unfilled at the end of the year under report, there being at the time no suitable and qualified Health Visitors to occupy the posts; all the Health Visitors who were successful at the last examination held in 1950 are now in the employ of Government; in fact they were previously employed by Government and were granted the necessary time and facilities to take the course leading up to the Health Visitors Certificate of the Royal Sanitary Institute.

As a result of the increase in the number of Sanitary Inspectors the City is now divided into 18 Sanitary Districts with a Sanitary Inspector in charge of each.

The number of premises in these districts varies somewhat widely but averages between 190 the lowest and 1,230 the highest, depending upon the location, size of premises, type of buildings, one storey or two or more storeys, &c., &c.

The District Sanitary Inspector is in complete charge of all the sanitary services in his district; in fact he is, in a sense, the head functionary in a sanitary sense of his district and is answerable to the Chief Sanitary Inspector and ultimately to the Head of Department for the health and sanitary state of his district.

Sanitary control of these 18 districts, which have now been reduced in size, can now be more casily effected; the Sanitary Inspector is expected to do at least 25 house to house inspections every day, and he must cover his district, i.e. inspect each premises in his district, at least once in five weeks.

Besides the 18 District Sanitary Inspectors 7 others are employed in the execution of specific duties of a special nature as follows:

- (1) One for the inspection of buildings, reporting upon building plans, layouts, specifications, completion certificates, &c., the inspection of buildings in the course of erection to ensure the provision of the necessary open spaces and the placing of the sanitary conveniences on the sites shown on the plans and their proper and efficient construction, the drafting and preparing of charts, graphs and diagrams for annual reports, and departmental use, &c., &c.
- (2) Another does (a) the collection of daily samples of the City's mixed water supply and the taking of bi-weekly and if necessary, daily samples at the several river and well sources of supply; (b) the patrolling of the various catchment areas of the river and well sources of water supply to see that the bye-laws for the protection of these sources are not contravened; (c) the investigation, taking of necessary action, and reporting upon any matter considered urgent by the Medical Officer of Health and the Chief Sanitary Inspector.
- (3) A third is engaged in (a) the preparation, mapping out and the supervision of the work of the Anti-Rat Unit; (b) the investigation of and reporting upon all cases of notifiable infectious diseases, the supervision of the Unit engaged in the disinfection and disinfestation of premises including theatres, common lodging houses, night shelters, &c., &c.
- (4) Two (2) Sanitary Inspectors were posted to the Wharf Area to examine consignments of foodstuffs on their arrival at the Port-of-Spain Wharves and before they are distributed to the City and thence to other parts of the Colony, but one of these Inspectors was away during the last quarter of the year under report on study leave in London for the purpose of taking a course in Food Hygiene.

- (5) One Inspector inspects the food supplies, food stores and shops, reports and checks upon food handlers, itinerant vendors, &c., to secure their registration and the registration of food shops, parlours and restaurants, &c.
- (6) One Sanitary Inspector is in charge of and prepares, plans, maps out and supervises the work of the anti-mosquito unit and the anti-rabies unit.

There are two overseers; one is in charge of the anti-mosquito unit which comprises 2 checkers, 1 recorder, 6 supervisors, 27 aedes inspectors, 9 men in a clearing unit, 4 men in a ladder unit, 5 men in an oiling unit and 2 general mosquito inspectors; the other overseer is in charge of the anti-rat unit which comprises 1 timekeeper, 1 checker, 8 drivers, 26 trappers, 2 yardmen and 1 office attendant.

There are 6 men employed in disinfecting and disinfecting premises and they work under the direction and supervision of the Sanitary Inspector in charge of the anti-rat unit and disinfection unit; the operations of 6 others, the anti-bat unit, are directed and supervised by the Sanitary Inspector in charge of the Anti-Mosquito Unit.

The caretaking and maintenance of the Public Conveniences, a service transferred from the City Engineer's Department in 1943, is carried out by 9 men.

I have already stated in previous annual reports that additional responsibility entailing care, control, and supervision was added to the Department when the Unit maintained by the Corporation for the emptying of cesspits, cesspools and "septic tanks" was transferred from the City Engineer's Department, to the Public Health Department in 1946. This unit comprises 1 checker, 2 chauffeurs, 12 cleaners in two gangs, a carpenter, a cooper, and a yardman stationed at the Mucurapo Pumping Station where the night soil is disposed of, and it works under the direction and control of the Supervisor of Cleansing of Cesspits.

Actually, the outdoor Staff comprised in the year under report 25 Sanitary Inspectors 1 Supervisor, 2 Overseers and 136 miscellaneous workers on the non-pensionable staff, all under the direction, care, control and supervision of the Chief Sanitary Inspector.

The indoor staff which takes care of the purely clerical activities of the Department in so far as they affect correspondence, verbal and written reports, the preparation of the monthly, quarterly and annual reports, the issuing of licences, badges, certificates of registration, and which is also concerned with the compilation of statistics, the keeping of the financial records and transactions of the Department and the various books, registers and minutes, &c., &c., comprise 2 Senior Sanitary Inspectors, 1 Junior Sanitary Inspector, 2 Clerical Assistants, 1 Scientific Assistant, 1 Stenotypist, 1 Typist, 1 Messenger, 1 Office attendant, all under the direction, care, control and supervision of the Chief Clerk.

Premises, &c., Disinfected for Infectious Diseases and Vermin-1952

			Diseases					6.5 *	Premises sprayed
Pneumonia						•••	•••		52
	• • •	•••	•••						. 96
Enteric Fever	•••	• • •	•••	•••					30
Diphtheria	• • •	•••	•••			•••		•••	16
Puerperal Fever	• • •	•••	•••	•••	•••	•••		•••	· —
Ophthalmia Ncon	atorum	•••	•••	•••	•••			*** * [8
Chicken Pox	• • •	•••	•••	•••		•••	• • •	•••	66
Poliomyelitis	•••		•••	•••		•••	•••	• • •	2
Encephalitis Leth	argica	•••	•••	•••	•••	•••	•••	•••	1
			Total	•••					271
Vermin	•••	•••	•••	•••	•••	•••			426

14,468 Cesspits were sprayed with a mixture of crude and distillate oils (free of charge) as a routine measure of prevention against spread of the bowel-filth diseases.

Inspection of Premises, &c., by Sanitary Inspectors—1952

Average Monthly No. of Visits to Dwellings, Shops and other Premises ... 8,928

Inspection of Stores, Shops, &c.

			Average Monthly No. of Visits				Average Monthly No. of Visits
Provision and Meat Shops			188	Sweet Drink Carts	•••	•••	17
rovision Stores			64	Dairies and Cowsheds	,		54
Restaurants and Cookshops	•••		82	Stables	•••		27
Dakenouses		•••	28	Goat Pens			89
Bread Depots		•••	11	Aerated Water Factories		•••	8
Cake and Ice Cream Shops	•••	•••	276	Soap Factories	.:.	•••	4
Fry Shops Hotels	•••		12	Other Factories	•••	• • •	102
Markets	•••	•••	11	Schools	• • •	•••	31
Spirit Class			5	Common Lodging Houses		•••	4
Spirit Shops	•••		44	Barber Shops	•••	•••	28
Ice Cream Carts and Pails	•••		36	Dyeworks	•••	•••	1
Cake Trays and Baskets	•••	•••	52	Laundries	•••	•••	23
Provision Trays and Baskets	•••	•••	100	Garages	•••	•••	35
Dicau Carts and Rogizate	•••	•••	11	Tanneries	•••	•••	3
Fresh Fish Trays	•••	•••	10	Public Urinals ·	•••	•••	6
Oyster Vendor's Baskets Plantain Carts	•••	•••	3	Boats	•••	•••	6
riantam Carts	•••	•••	3				

Results of Notices and Verbal Directions-1952

Yard pavements Depressions in yards Yards Drains, sinks, gullies, washing	$\frac{42}{5}$	139	_			90	
Depressions in yards Yards	5	—				00	_
Yards	5			·—-	—	_	_
		7	3,535	—	—	_	_
Drains, sinks, guilles, wasing							
troughs, &c	187	563	2,923			_	—
Lavatories, sewer basins, flushtanks,							
urinals, bath rooms, &c	264	263	1,094	— I	2		_
Privies	238	1,003	113	— I		544	-
Cesspits	159	126	1,660			-	174
Manure Heaps	- 1	-		-	878	_	_
Rat Holes	- 1	_		_	123	_	_
Tree Shade, Overgrowths of bush	1	- /		_	1,134		
Dustbins	931	153	321	· - !	—	_	
Dustbin covers	557	_	- 1	_	—		_
Shops, Parlours, Restaurants, Bakehouses,						201	
Hotels, &c		157	2,790	385	_	304	_
Aerated Water Factories	_		27		_	3	_
Bread Carts	-			31	_		_
Barracks, Common Lodging Houses	28	91	42	€2		50	_
Garages, Kitchens	_	75		- //	- 0	101	_
Cowsheds, Stables	- 1	39	39	- 1	- 11	53	_
Tanneries, Soap Factories, &c	- 1	_	_		-	_	_
Close-boarding, Ventilation of Houses	2	_				- 0	_
Barber Shops and other Workshops	- 1	_	75	9	- 0		
Schools	- 1	-	- 11	1			

Reports to	Water a	and Sev	werage D	epartm	ent—195	2	
Report	ts						Total
Leaks, defective taps, ch	okes, &	c		•••	•••	•••	2,835
	Anti-R	abies :	M easures	<u>1952</u>			
	\mathbf{T}_{RA}	PPING,	&с., оf В	BATS			
No. of locations ins				•••	•••		14,204
		BATS	Caught				
Artibeus			•••	•••			322
Desmodus		•••	•••	•••	•••		14
Hemiderma	•••	•••	•••	•••	•••		71
Molossus	•••	•••		•••			155
Noctilio Leporinus	•••	•••	•••				_
Saccopteryx	•••	•••	•••	•••			1
Myotis	•••	•••	•••	•••		•••	8
${ m Phyllistoma}$	•••	•••		•••		•••	46
							617*

^{*}No bats were caught in adjacent districts outside the City limits.

Building Plans, &c.—1952

Reports made by the Public Health Department were as follows:—	
On plans, &c., for reconstruction of reconditioning of buildings	661
On applications for leases of land in Woodbrook and Gonzales Place	99
On premises in which building operations were in progress	254
On application for certificates of completion of buildings	103

Cleansing of Privies, &c.—1952

Under the Public Health Ordinance, Ch. 12. No. 4, Section 64 (1) (c), Cesspits, Cesspools and Septic Tanks were cleansed as follows:—

East Dry River	•••	•••	•••	•••	•••	721
Belmont	•••	•••		•••	•••	618
St. James	•••	•••	•••	•••	•••	225
Woodbrook	•••	•••		•••	•••	96
					•	1,660
Out Districts	•••	•••	•••	•••	•••	_

Outstanding cesspits up to 31st December, 1952 numbered 19. Average cost per cesspit emptied: \$17.68.

Prosecutions—1952

	Offences					$No.\ Cas$	
Failing to comply							Fined \$129.00 Reprimanded Withdrawn Dismissed Prohibition Order
Failing to comply	y with notic			of the P	ublic H ea	alth	
Ordinance re	Streets	•••	•••	•••	•••	•••	11 Fined \$13.20 —
Breaches of Sale	of Foodstuff	s Bye-law	vs			•••	55 Fined \$205.70 28 Reprimanded 2 Withdrawn 8 Dismissed 93
Breaches of Sale	of Milk Bye-	laws	•••	•••			23 Fined \$124.60 9 Reprimanded 1 Dismissed
	Grand	TOTAL			•••		164
			Sr	ımmary			
	Cases			<i>J</i>			
	100	•••	•••	•••	•••	•••	Fined \$472.50
	45	•••	•••	•••	•••	•••	Reprimanded
	$\frac{5}{13}$	•••	•••	•••	•••	• • •	Withdrawn
	13	•••	•••	•••	•••	•••	Dismissed Prohibition Order
		•••	•••	•••	•••	•••	Frontiblion Order
	164						
		L	eave of	Absence	e—1952		

Leave of Absence—1952

Officers				Vacation Leave No. of days	Sick Leave No. of Days
					Ů Ú
Aberdeen, K.—Typist	···	•••	•••	—	93
Assing, C. C.—Deputy Chief Sanitary	inspector	•••	•••	42	21
Babb, F.—Sanitary Inspector	•••	•••	•••	—	28
Boxill, E.—Sanitary Inspector	•••	•••	•••	168	_
Braithwaite, E.—Sanitary Inspector	•••	•••	•••	14	_
Callender, E.—Sanitary Inspector	•••	•••	•••	28	_
Carpette, O.—Overseer	•••	•••	•••	28	_
Davidson, C.—Sanitary Inspector	•••	•••	•••	14	7
de Four, H.—Sanitary Inspector	•••	•••	•••	126	
Forde, G.—Sanitary Inspector	•••	•••	•••	28	_
Hinkson, G.—Sanitary Inspector	•••	•••	•••	14	_
Hodge, L.—Sanitary Inspector	•••	•••	•••	56	_
Joseph, A.—Messenger	•••	•••	•••	28	_
Khan, V. S.—Sanitary Inspector	•••	•••	•••	14	7
Langton, E.—Typist		•••	•••		28
Lewis, E.—Sanitary Inspector		•••	•••	14	_
McTurner, K.—Sanitary Inspector		•••	•••	14	_
Parris, J. E.—Overseer		•••	•••	126	—
Pierre, G.—Sanitary Inspector		•••	•••	31	
Sampson, A.—Sanitary Inspector	•••	•••	•••	14	
Scott, B. L.—Sanitary Inspector	•••	•••	•••	14	_
Seon, F.—Sanitary Inspector	•••	•••	•••	28	10
St. Cyr, H.—Sanitary Inspector	•••	•••	•••	28	_
Thomas, F. A.—Sanitary Inspector	•••	•••	•••	14	—
Young, J. F.—Supervisor	•••	•••	•••	84	21
				Study Leave	
Alfred, E.—Sanitary Inspector	•••	•••	•••	49	

FINANCIAL

Revenue and Expenditure 1950-52

REVENUE

			1950	1951	1952
Revenue collected by the E Department	Public F	Iealth 	\$812.10	\$683.00	\$ 628.82
	E	XPEND	ITURE		
Salaries and allowances			\$58,576.49	\$75,261.65	\$92,791.05
Wages and allowances			60,682.47	80,492.51	94,035.57
Materials, Maintenance, &c.		•••	9,942.32	17,303.04	20,830.53
		_	\$129,201.28	\$173,057.20	\$207,657.15
Disposal of Night Soil			6,274.28	6,481.83	7,217.48
Emptying of Cesspits	•••		24,361.54	32,085.20	*29,829.06
Total	•••		\$159,837.10	\$211,624.23	\$244,703.69

ACKNOWLEDGMENT

There can be no doubt that the work of the Public Health Department continues to increase every year with the increasing population of the City and with the need for greater, wider and more varied public health activity, and that we have been able to maintain a not unsatisfactory state of health and sanitation is due in no small measure to the devotion to duty of the staff, pensionable and non-pensionable, as a whole and to their unfailing loyalty and continuous co-operation under the able direction and leadership of those capable and conscientious lieutenants Mr. O. E. Forde, Cert. R. San. I., Chief Sanitary Inspector, and Mr. T. M. Mitchell, Cert. R. San. I., Chief Clerk.

As each year passes by I learn all the more to appreciate the work and worth of the Chief Sanitary Inspector and the Chief Clerk, as well as that of all members of the indoor and outdoor establishment who have all combined to work well together in the year under report, and who must of course work well together if success is to be achieved.

I have the honour to record my grateful appreciation of and to express my heartfelt thanks for a year's work well done under difficult and sometimes trying circumstances.

Once again I desire to bring their valuable services to the favourable notice of the Local Authority and to ask the Local Authority to make haste to provide those facilities and advantages that are enjoyed by Sanitary Inspectors employed with the Central Government, so that our men may be satisfied to remain with us and not desert us at the first opportunity of a suitable vacancy elsewhere after we have seen them through their "teething" period and after we have taken the trouble to initiate them in their life work and to train them in our methods.

^{*} Emptying of Cesspits—Amount recoverable from house owners \$11,197.55.

